From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: Brian.Harris@sv.sc.philips.com (Brian Harris)
Subject: 100V Owners
Message-ID: <304c6930@scs.philips.com>

This is a Mime message, which your current mail reader
may not understand. Parts of the message will appear as
text. To process the remainder, you will need to use a Mime
compatible mail reader. Contact your vendor for details.

--IMA.Boundary.599059558
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit
Content-Description: cc:Mail note part

To those of you fortunate folks that own a Central Electronics 100V, I direct this. One of my 100V manuals contained a loose instruction sheet, targeted for owners that didn't read the manual before firing up their rigs. The copy I have is very poor but I managed to read and retype it, just as it was originally. For those of you that have a 100V and don't have these instructions, I have attached them both in WordPerfect and ASCII format.

73,

Brian Harris WA5UEK

Proud Owner of (3) 100V's and (3) 600L's (one of which is serial number 1 and has the rare six band antenna switch option on the back that's ganged to the bandswitch)
--IMA.Boundary.599059558
Content-Type: application/octet-stream; name="ce100v.wpd"
Content-Transfer-Encoding: x-uuencode
Content-Description: Unknown data type

begin 666 ce100v.wpd

```
M_U=00XD#```!"@(``````@0```#E%`````*#EGT_5SI]<))3ZLM*F,F.7R\P
MR#)(]CF[\6NBX_EB$UAJ23VSI<S]*L@$F]!2M,NR1].$.<,E/;3*=LS$V1=0
M\%J=WU=Z@!E7XA#BES3;T"W[FD))^W+&D]R*K?9$2/_K,D1^Z%9%"6J0U1=H
M5QH3B@3@\^+5S_\)$T,9//2\%+T6[?%D>K1`:F0/T)@KZ';;N1(?8^X=/FY%
MB6/F,M<^J=YRA)5LFW9-4G&).N^;$J+&@@WIY"`"J8[%JXM7.W_H9WYK#\O]
M2$\*%K?AM<UV`]B`%W?N0JA=AYQ,&J2H)UGIB6$:7K77W;6B;""4TP?5\ZA6
MB:P6S]K,F(=LA!-K(,,W&)"9&Q(SS";Z58$T:E+DDPW<[K&=W4XP6JPVIQJ7
M/N]?L=^!F5Z(""!AB%:,C%WE\5J%W*N\7TFB.,64HDE6977&!RC=H"><WB96
MV=__#M>?3P$YW49.:.L*OV0P/%:^9F>I_8+O5:2N0=-GQ7$WEXN+BFUB%2WY
M*IL*9.&%A,-&%B*;U(ZRQ?V)GA,KP@J$.99#><4.V!]D,L)D;RPL9S$`X&$]
M2EQ:(-6'&IX&/8#=$:\%29E-WQ]?WA8:]_9=PY]RU^9GHKJ3;,C'@>CRKPYM
M@GDP",'"CP8^JT':2W:2(J4"``<``````````````@C`0```(8```!B`@``
M`%4!``$`3@```.@"```))0$````&````-@,```LP`@```"@````\`P``"`(!
```

```
M````#P```&0#```&"`$````6````<P,```"82`!0`"``3`!A`',`90!R`$H`
M90!T`"``-``O`#0`30``````````````````````````````````````````
M``````````````!(4%!#3#5%````````"`$(`2P!+`$L`2P!"`$(`3`W"<+.
M`0#"SO<"7RN04C<)@"8`!```8`#:!4\#\`#(&6@02`T````)````6@`;`0"+
M%#8`5`!I`&T`90!S`"``3@!E`'<`(`!2`&\`;0!A`&X`(`!2`&4`9P!U`&P`
M80!R`````````````0`"`%@"`0````0`*``````````````````````````!
M$P(`)`"A````H0````@S?`!X```"````(`0```P$`"@````P```#1`0P```(`
M"`$,`-'="A``@P$$``,``@`A$`#=W0L+``,```0+`-W1%1$`@`$&``0`'TP!
M`!$`T=,%#````0`"``P`T_$`!P'QU!L?`(`!`@`(`/(!IM<!`/(!``!8`@(`
M6`(``!\`U/$!!P'Q\0('`?'Q`P<!\4E.@$-!4T6`5$A)4X!)4X!93U7,TP4,
M```!```"#`#3S$UA>6)E@'EO=8!A<F6`9&EF9F5R96YT@&%N9(!R96%D@'EO
M=7*`:6YS=')U8W1I;VZ`8F]O:X!T:&]R;W5G:&QY@&)E9F]R98!Y;W6`;W!E
M<F%T98!N97?,97%U:7!M96YT+H"`36%N>8!D;X!N;W0N@(!4:&5S98!N;W1E
M<X!A<F6`=W)I='1E;H!F;W*`=&AE@&)E;F5F:72`;V:`<W5C:(!P96]P;&4N
MS,Q!=(!L96%S=(!S:7B`9F5E=(!O9H!C;V%X@&-A8FQE@'-H;W5L9(!F;VQL
M;W>`=&AE@#$P,%:`8F5F;W)E@&%N>8!O=&AE<H!D979I8V4L@'-U8VB`87.`
M86[,86UP;&EF:65R+(!L;W>`<&%S<X!F:6QT97(L@&5T8R[,S$EF@'EO=7*`
M,3`P5H!D;V5S@&YO=(!S965M@'1O@'=O<FN`<')O<&5R;'F`=VAE;H!Y;W6`
M9FER<W2`9V5T@&ET+(!D;X!N;W2`9V5T@'!A;FEC:WDN@(!!<\QI;H!R96-E
M:79E<G.`86YD@'1E;&5V:7-I;VZ`<V5T<RR`;6]S=(!C875S97.`;V:`=')O
M=6)L98!A<F6`9&5F96-T:79E@'1U8F5S+H"`26:`>6]U@&AA=F6`S'1R;W5B
M;&4L@&-H96-K@'1H98!T=6)E<RZ`@$%L<V^`;6%K98!S=7)E@'1H98!V87)I
M;W5S@'!L=6>`:6Z`=6YI='.`86YD@&-O;FYE8W1I;VYS@&%R98!F=6QL><QS
M96%T960NS,Q)9H!Y;W6`<W1I;&R`:&%V98!T<F]U8FQE+(!T86ME@'1H98!S
M972`;W5T@&]F@'1H98!C86)I;F5T@&)Y@'5N<V-R97=I;F>`=&AE@&9O=7*`
M<G5B8F5RS&UO=6YT:6YG@&9E972`86YD@'1H98!T=V^`;&%R9V6`<V-R97=S
M@&%T@'1H98!R96%R@&]F@'1H98!C86)I;F5T+H"`5&AE;BR`=VET:(!T:&6`
M<&]W97*`;V9F+,QI;G-P96-T@&%L;(!T:&6`<V]L9&5R962`8V]N;F5C=&EO
M;G.`=&^`;6%K98!S=7)E@'1H97F`87)E@'-O;&ED+(!P<F]P97)L>8!S
M;VQD97)E9"R`86YDS&YO=(!C;VQD@'-O;&1E<F5D+H"`179E<GF`969F;W)T
M@&ES@&UA9&6`872`=&AE@&9A8W1O<GF`=&^`:&%V98!T:&6`87-S96UB;'F`
M86YD@'-O;&1E<FEN9\QO<&5R871O<G.`9&^`=&AI;F=S@')I9VAT@&)U="R`
M979E;H!A<X!Y;W6`86YD@$DL@'1H97F`:&%V98!T:&5I<H!B862`9&%Y<X!A
M;F0L@'=H96Z`=&AE>8!D;RR`S'1H96ER@&UI<W1A:V5S@&%R98!N;W2`86QW
M87ES@&1I<V-O=F5R962`8F5F;W)E@'1H98!S972`:7.`<VAI<'!E9"[,S%1O
M@'!U=(!Y;W5R@'-E=(!I;G1O@&]P97)A=&EO;BR`8V]N;F5C=(!I=(!T;X!A
M@'-U:71A8FQE@&%N=&5N;F&`86YD@&%L;&]W@&ET@'1O@'=A<FV`=7"`9F]R
MS&%T@&QE87-T@#$P@'1O@#$U@&UI;G5T97,L@'=I=&B`=&AE@/(.\F9U;F-T
M:6]N\P[S@'-W:71C:(!I;H!35$)9+H"`069T97*`=&AE@'=A<FV`=7`L@'1U
M<F[0!!4```L`"0`!8!BP$Q4``2`5`-!T:&6`\@[R96UI<W-I;V[S#O.`<W=I
M=&-H@'1O@&YU;&R`86YD@&)A;&%N8V6`=&AE@&-A<G)I97*`9&]W;H!T;X!M
M:6YI;75M@')E861I;F>`;VZ`=&AE@&UE=&5R+-`$%0``"P`)``%0&:`4%@`!
M(!4`T"AT;W=A<F1S@(2`-S!$0BDL@'=I=&B`=&AE@'1W;X!P;W1S@&UA<FME
M9"R`0D%,+H"`1&^`;F]T@&%T=&5M<'2`=&^`8F%L86YC98!O=72`=&AE@&-A
M<G)I97+,96%C:(!T:6UE@'EO=8!S=&%R=(!T;X!O<&5R871E+H"`272`=VEL
M;(!S=&%Y@&EN@&%D:G5S=&UE;G2`9F]R@&QO;F>`<&5R:6]D<X!O9H!T:6UE
M@&5X8V5P=,QF;W*`=&AE@&9I<G-T@&9E=X!M:6YU=&5S@&]F@'=A<FV`=7`L
M@'=H96Z`:72`;6%Y@&)E@&]N;'F`A(`U,$1"+H#,S$%F=&5R@&YU;&QI;F>`
```

```
M:&%S@&)E96Z`86-C;VUP;&ES:&5D+(!S972`=&AE@%!O=V5R@$-O;G1R;VR`
M=&^`86)O=72`:&%L9H!O;H!A;F2`=&AE@&5M:7-S:6]NS'-W:71C:(!T;X!3
M4T*`*(!54T*`;W*`3%-"@"DN@(!4:&5N@&%D:G5S=(!T:&6`4W!E96-H@$QE
M=F5L@'-O@'1H872`=&AE@&QI;6ET97*`8G5L8H!F;&%S:&5SS&]N;'F`;V-C
M87-I;VYA;&QY+H"`3F5X=(!S972`=&AE@%!O=V5R@$-O;G1R;VR`872`;W*`
M8F5L;W>`=&AE@'!O:6YT@'=H97)E@&9L872`=&]P<&EN9X!S:&]W<\QO;H!T
M:&6`<V-O<&4N@(!7:&5N@'1H98!T=6)E<X!A<F6`;F5W@&%N9(!E=F5R>71H
M:6YG@&ES@'!R;W!E<FQY@'!E86ME9"R`=&AE<F6`:&%S@'1O@&)E@&9R;VV`
M;F]U9VB`875D:6^`86YD@')F@&)O=&B`:6X`86QL@&AE9&R`=&AE@&9L87.`
M9RZ`@%1H97)E9F]R92R`;V9F@&%L;(!S96-O;F1S+(!T:&6`=&EM98!Y;W6`
M=&AE@%!O=V5R@&-O;G1R;VR`872`;W*`8G5L8H!S:&]U;&0`8VAA;F=E+(!A
M@')O=6=H;'F`=&AA=(!R97!O<G1S@&]N@$%-+H"`069T97*`<V5T=&EN9X!U
M<(!O;H!34T*`*(!,4T*`;W*`=&AE@&%D:G5S=&5D@&QI;6ET97*`=&AE@$-/
M55-"@"DL@&-H86YG98!T:&6`96UI<W-I;VX`8VAA;F=E@&AE<F6`=&AE@$%-
M=VET:&]U=(!A;F1E;9VEN9X!E:71H97*`=&AE@&%M<&QI9FEE<B!O<H!H!0;W=E<H!C
M;VYT<F]L<RR`<V5T@'1H98!!38!P;W=E<H!T;R"`,3`P@%>H=&AE@'!O=V5R
M<H`Q,#!6@&ESS'=O<FMI;F>`:6Z`=&^`=&AE@&-O<G)E8W2`:VEN9(!O9H!A
M@&QO860L@'EO=8!W:6QL@&)E@&%B;&6`=&^`<W=I=&-H@&9R;VV`4U-"@'1O
M@$%-@'=I=&AO=72`8VAA;F=I;F>`=&AE@'!O=V5R@&-O;G1R;VR`4&]W97*`0V]N=')O
M;"Z`@$EF@&ET@&ES@&YO="R`>6]U@'=I;&R`:&%V98!T;X!R96%D:G5S=(!T
M:&6`4&]W97*`S$-O;G1R;VR`<&]T@'1O@&)E@&]N@'1H98!L87)G9726!E@&]F@'1H98!P
M<&EN9X`H;W9E<FUO9'5L871I;VXI@&]N@$%-+H"`069T97*`<V5T=&EN9X!U
M<(!O;H!!32S,8VAA;F=E@'1H98!E;6ES<VEO;H!S=VET8VB`=&^`0U>`86YD
M@&%D:G5S=(!T:&6`0U>`<&]T@'1O@#$W,(!7871T<RZ`@$%S@&1E<V-R:6)E
M9(!A8F]V92S,9F]R@$%-@&EF@'EO=8!A<F6`=V]R:VEN9X!I;H!T;X!T:&6`
M8V]R<F5C=(!K:6YD@&]F@&%N=&5N;F$L@'1H98!S96-O;F1S+(!T:&6`8F%N
M=VET8VB`9G)O;<Q34T*`=&^`04TL@&]R@$-7@'=I=&AO=72`8VAA;F=I;F>`
M=&AE@'!O=V5R@$-O;G1R;VPN@(!)9H!Y;W6`9&^`8VAA;F=E@'1H98!!3H!S
M<$-O;G1R;VR`9&EA;&EN9X!T:&6`4&]W97*`0V]N=')O;(!P;W2`=VAE;H!C
M97*`0V]N=')O;(!P;W2`=VAE;H!C:&%N9VEN9X!T;X!T:&6`9&EF9F5R96YT
M@'1Y<&5S@&]FS&5M:7-S:6]N+H"`5VAE;H!Y;W6`8VAA;F=E@&)A;F1S+(!A
M<'!R;WAI;6%T96QY@'1H97-E@'-A;66`<V5T=&EN9W.`=VEL;(!B98!M86EN
M=&%I;F5D@&EFS'EO=7*`86YT96YN87.`:&%V98!E>&%C=&QY@'1H98!S86UE
M@&EM<&5D86YC97.`*&EN8VQU9&EN9X!35U(I@&]N@'1H98!B86YD<R[0!A4`
M``L`"0`!\"U`*2P``2`5`-#1%A$``P<``08``'TP"`!$`T=$!#@```@`(`;`$
M#@#1T1<*``,```H`T<Q4:&6`,3`P5H!H87.`=&AE@&UO<W2`<&QE87-I;F>`
M<W!E96-H@'%U86QI='F`8G5I;/$`"``'Q:?$!"``'Q=(!I;G1O@&ET@&]F@&%N
M>8!A;6%T975R@'1R86YS;6ET=&5R@&]N@,QT:&6`;6%R:V5T+H"`272`86QS
M;X!H87.`=&AE@&)E<W2`:6YT96QL:6=I8FEL:71Y+(!W:&EC:(!M96%N<X!Y
M;W6`=VEL;(!B98!U;F1E<G-T;V]D@&UO<F6`=VAE;H!Y;W6`=&%L:R^`@&UO
M<G-T;V]D@&QE<W.`;V9T96Z`=VAE;H!T:&6`8V]N9&ET:6]N<X!A<F6`8F%D
M<X!A<F6`8F%D+H"`1&^`=&AE@'-E='1I;F>`:6Z`=&AE@'-A;64`=V%Y@&9O
M<F5S@&)Y@&EM<&5R:6]N8V%L;'F`<V5T=&EN9X!T:&6`<&]W97*`:6Z`86QL
M;VYE+H"`57-E@&]F@'1H98!R96-E:79E<B!C;VYT<F]L<R!A<F4@870@=&AE
M@,AE@')A;F=E@&]F@#(U@%=A='1S@&9O<H!A;F1I;F<@=&AE@%=A='1A9V6`
M;W6`<W!E86LN@(!/;F-E@'EO=8!H879E@&US9&5R@&YO<FUA;"R`;W5T<'5T
M96%K@&-O;G1R;VQS@')E86-H:6YG@'1O@$%L<&AA@%)E=F5R<V6`4')O=&5C
M<W!E=&%L;&P`;VX`=&AE@&%M<&QI9FEE<BR`879A:6QA8FQE@&EN9&EC871O
M=&EO;B!S971T:6YG<X!F;W*`=&AE@%=A='1M971E<H!A<F6`:&5R92R`<W!E
M@'-E='1I;F=S@&]F@'1H98!R96-E:79E<BR`=&AE@&%M<&QI9FEE<B!A;F1E;9VEN9X!E
M<&QI9FEE<B!I<X!S=&EL;"!C;VUP;&5T96QY@&%D:G5S=&%B;&4N@(!796QL
```

```
M;&%C98!T:&5M+(!I=(!I<X!P<F5F97)A8FQE@'1O@&=E=(!T:&5M@&9R;VV`
M=&AE@&9A8W1O<GDN@(!4:&6`<F5A<V]N@&9O<H!T:&ES@&ES@&YO=(#,:6YC
M<F5A<V6`=&AE@'-A;&5S@&]F@'1H:7.`;F]NA'!R;V9I=(!I=&5M@&9R;VV`
M=&AE@&9A8W1O<GF`8G5T@'1O@&%S<W5R98!Y;W6`;V:`8F5T=&5RS'1U8F5S
M+H"`5&AE@'1U8F6`9F%C=&]R:65S@&UA:V6`86)O=72`9FEV98!C;&%S<V5S
M@&]F@'1H97-E@'1U8F5S@&%N9(!S:&EP@'1H96V`:6YD:7-C<FEMA,QI;F%T
M96QY@'1O@&1I<W1R:6)U=&]R<RZ`@$,N12Z`:&%S@&%R<F%N9V5D@'1O@&)U
M>8!O;FQY@&]N98!C;&%S<X!O9H`V-34P+(!A;F2`=&AE;H!A9V5SS'1H96V`
M<V^`=&AA=(!T:&5Y@&-A;H!B98!I;G-T86QL962`:6Z`<V5T<X!A;F2`=6YI
G9F]R;8!R97-U;'1S@&]B=&%I;F5D+LS,S-(`#@```@`L`;`$#@#2
`
end
--IMA.Boundary.599059558
Content-Type: application/octet-stream; name="ce100va.wpd"
Content-Transfer-Encoding: x-uuencode
Content-Description: Unknown data type

begin 666 ce100va.wpd
M("`@("`@("`@("`@("`@("`@("`@("`@("`@24X@0T%312!42$E3($E3(%E/
M50T*#0I-87EB92!Y;W4@87)E(&1I9F9E<F5N="!A;F0@<F5A9"!Y;W5R(&EN
M<W1R=6-T:6]N(&)O;VL@=&AO<F]U9VAL>2!B9690<F4@>6]U(&]P97)A=&4@
M;F5W#0IE<75I<&UE;G0N("!-86YY(&1O(&YO="X@(%1H97-E(&YO=&5S(&%R
M92!W<FET=&5N(&9O<B!T:&4@8F5N969I="!O9B!S=6-H('!E;W!L92X-"@T*
M070@;&5A<W0@<VEX(&9E970@;V8@8V]V]A>"!C86)L92!S:&]U;&0@9F]L;&]W
M('1H92`Q,#!6(&)E9F]R92!A;GD@;W1H97(@9&5V:6-E+"!S=6H(&%S(&%N
M##0IA;7!L:69I97(L(&QO=R!P87-S(&9I;'1E<BP@971C+@T*#0I)9B!Y;W5R
M(#$P,%8@9&]E<R!N;W0@<V5E;2!T;R!W;W)K("!R;W!E<FQY('=H96X@>6]U
M(&9I<G-T(&=E="!I="P@9&\@;F]T(&=E="!P86YI8VMY+B`@07,-"FEN(')E
M8V5I=F5R<R!A;F0@=&5L979I<VEO;B!S971S+"!M;W-T(&-A=7-E<R!O9B!T
M<F]U8FQE(&%R92!D969E8W1I=F4@='5B97,N("!)9B!Y;W4@:&%V92`-"G1R
M;W5B;&4L(&-H96-K('1H92!T=6)E<RX@(%1H92!S=7)E<W0@;F%T=7)E('1H92!V
M87)I;W5S('!L=6<@:6X@=6YI='!E=F5R(&1O(&-O;FYE8W1I;VYS(&%R92!F=6QL
M>0T*<V5A=&5D+@T*#0I)9B!Y;W4@<W1I;&P@:&%V92!T<F]U8FQE+"!T86ME
M('1H92!S970@;W5T(&]F('1H92!C86)I;F5T(&)Y('5N<V-R97=I;F<@=&AE
M(&9O=7(@<G5B8F5R#0IM;W5N=&EN9R!F965T(&%N9"!T:&4@='=O(&QA<F=E
M('-C<F5W<R!A="!T:&4@<F5A<B!O9B!T:&4@8V%B:6YE="X@(%1H96XL('=I
M=&@@=&AE('!O=V5R(&]F9BP@8VAE8VL@:6YS:61E(&9O<B!L;V]S92!C;VYN
M96-T:6]N<R`H=&AE>2!A<F4@9&ER96-T(&-O;FYE8W1I;VYS('1H97)E*2!C
M;VYN96-T:6]N<R!T;R!M86ME('-U<F4@=&AE>2!A<F4@<V]L9&5R960@9F]R
M;W!E<FQY('-O;&1E<F5D+"!A;F0@8V]R<F5C=&QY('-O;&1E<F5D+B`@179E
M<GD@969F;W)T(&ES(&UA9&4@=&\@87-S=7)E('1H92!Q=6%L:71Y(&]F('1H
M87-E(&)Y('1H92!F86-T;W)Y(&)U="!O8V-A<VEO;F%L;'D@<V]M971H:6YG
M.F=H="!B=70L(&%N9"!S;VQD97)I;F<@:7,@82!P87)T:6-U;&%R('!R;V)L
M8F%D(&1A>7,N(%=H96X@97AA;6EN:6YG(&)U="!T:&4@86UP;&EF:65R('!R
M87)E(&YO="!A;'=A>7,@9&ES8V]V97)E9"!B9690<F4@=&AE(&-A<R!I<R!S
M:&EP<&5D+@T*#0I4;R!P=70@>6]U<B!S970@:6YT;R!O<&5R871I;VXL(&-O
M;FYE8W0@:70@=&\@82!S=6ET86)L92!A;G1E;FYA(&%N9"!P;W=E<B!S=7!P
M;R!W87)M('5P(&9O<B`P,`@=&\@,34@;6EN=71E<RP@=&AE;B!A9&IU<W0@=VET
M:"!T:&4@9G5N8W1I;VX@<W=I=&-H(&EN(%-31"!P;W-I=&EO;B!A=&`@=&AE
```

```
M;2!U<"P@='5R;@T*=&AE(&5M:7-S:6]N('-W:71C:"!T;R!N=6QL(&%N9"!B
M86QA;F-E('1H92!C87)R:65R(&1O=VX@=&\@;6EN:6UU;2!R96%D:6YG(&]N
M('1H92!M971E<BP-"BAT;W=A<F1S("T@-S!$0BDL('=I=&@@=&AE('1W;R!P
M;W1S(&UA<FME9"P@0D%,+B`@1&\@;F]T(&%T=&5M<'0@=&\@8F%L86YC92!O
M=70@=&AE(&-A<G)I97(@+"F5A8V@@=&EM92!Y;W4@<W1A<G0@=&\@;W!E<F%T
M92X@($ET('=I;&P@<W1A>2!I;B!A9&IU<W1M96YT(&9O<B!L;VYG('!E<FEO
M9',@;V8@=&EM92!E>&-E<'0@-"F9O<B!T:&4@9FER<W0@9F5W(&UI;G5T97,@
M;V8@=V%R;2!U<"P@=VAE;B!I=B!M87D@8F4@;VYL>2`M(#4P1$(N(`T*#0I!
M9G1E<B!N=6QL:6YG(&AA<R!B965N(&%C8V]]M<&QI<VAE9"P@<V5T('1H92!0
M;W=E<B!#;VYT<F]L('1O(&%B;W5T(&AA;&8@;VX@86YD('1H92!E;6ES<VEO
M;@T*<W=I=&-H('1O(%-30B`H(%530B!O<B!,4T(@*2X@(%1H96X@861J=7-T
M('1H92!3<&5E8V@@3&5V96P@<V\@=&AA="!T:&4@;&EM:71E<B!B=6QB(&9L
M87-H97,M"F]N;'D@;V-C87-I;VYA;&QY+B`@3F5X="!S970@=&AE(%!O=V5R
M($-O;G1R;VP@;W(@8F5L;W<@=&AE('!O:6YT('=H97)E(&9L870@=&]]P
M<&EN9R!S:&]]W<PT*;VX@=&AE('-C;W!E+B`@5VAE;B!T:&4@='5B97,@87)E
M(&YE=R!A;F0@979E<GET:&EN9R!I<R!P<F]]P97)L>2!P96%K960L('1H97)E
M(&ES(&UO<F4@=&AA;B`-"F5N;W5G:"!A=61I;R!A;F0@<F8@9')I=F4@=&\@
M8V%U<V4@9FQA="UT;W!P:6YG+B`@5&AE(&]F('1H92!T
M:6UE('EO=2!W:6QL('-E=`T*=&AE(%!O=V5R(&-O;G1R;VP@;&5S<R!T:&%T
M:&%N(&UA>"X@8VQO8VMW:7-E('!)O=&%T:6]]N+@T*#0I!9G1E<B!S971T:6YG
M('5P(&]N(%-30B`H($Q30B!O<B!54T(@*2P@8VAA;F=E('1H92!E;6ES<VEO
M;B!S=VET8V@@=&\@86YD+"!W:71H('=I=&@@#0IC:&%N9VEN9R!E:71H97(@
M=&AE(%-P965C:"!O<B!0;W=E<B!C;VYT<F]L<RP@<V5T('1H92!!(#2!P;W0@
M=&\@,3`P(%=A='1S+B`@268@>6]]U<B`Q,#!6(&ES#0IW;W)K:6YG(&EN('1O
M('1H92!C;W)R96-T(&MI;F0@;V8@82!L;V%D+"!Y;W4@=VEL;"!B92!A8FQE
M('1O('-W:71C:"!F<F]M(%-30B!T;R!,4T(@;W(@55-"#0IH879I;F<@=&\@
M8VAA;F=E('1H92!0;W=E<B!C;VYT<F]L+B`@268@=&]:70@:7,@9&]]N="!Y;W4@
M=VEL;"!H879E('1O(')E861J=7-T('1H92!0;W=E<B!C;VYT<F]L(&%N9"]T
M('-O('1H97)E(&ES(&YO(&9L870M=&]]P<&EN9R`M(&1O;B=T(&UO=F4@;&EN
M(&]N($%-+B`@069T97(@<V5T=&EN9R!U<"!O;B!"!L;W<@<&]W97(L(&%N
M9"!A9&IU<W1I;F<@=&\@=&AE(&AI9VAE<W0@<&]W97(@;&EM:70@:6YS='1H
M92!O<F1E<B!T;R!G970@82!G;V]D(&%U9&EO+"!D;R!N;W0@8V]N=&EN=64@
M=&\@;W!E<F%T92!A="!T:&ES(&QE=F5L('5N;&5S<R!Y;W4@:&%V92!A=7-E
M9"!T:&4@;W)T:&]D;W@@;65T:&]D+B`@26X@=&AE($QO=V5R(%!O=V5R(%)A
M;F=E('1H92!P;W=E<B!C;VYT<F]L('-H;W5L9"!N979E<B!B92!T=7)N960@
M9G5L;'D@8VQO8VMW:7-E+@T*26X@=&AI<R!R86YG92!O9B!T:&4@0T%2(&%N
M9"!#;VYT<F]L(&-A;B!B92!A9&IU<W1E9"!T;R!A;GD@<&]]I;G0@8F5T=V5E
M;B!Z97)O(&%N9"!M87AI;75M(&5M:7-S:6]N('-E='1I;F<@=VET:"`H3&5A
M9"!S8VAE9'5L92!F;W(@96%C:"!M;V1E*2X@(%-O=6YD(&-O;G1R;VQS(&%R
M92!F;W(@8V]N<VES=&5N8WD@;V8@=&AE('-I9VYA;"!B>2!M86ME<B!T:&4@
M;V8@=&AE(&1E=F5L;W!M96YT(&%N9"!A;&P@=&AE(&EN<W1R=6UE;G1S+B`@
M:&5L<"!A;F0@9&ES8W5S<VEO;B!O;B!Y;W5R(&EN=&5R97-T:6YG(&]]N+@T*
M:7,@8F%S960@;VX@=&AE(&YO<FUA;"!A9&IU<W1M96YT<R!O9B!T:&4@=&]]P
M(&YE8V5S<V%R>2!O<&5R871I;VX@;V8@=&AE(')A9&EO(&%N9"!T:&4@<')O
M;&4@9F5A='5R97,@8GD@:6UP<F]P97(@;W!E<F%T:6]N+"!O<B!A(&9R96%K
M(&UI8W)O<&AO;F4N("!5<V4@82!M:6-R;W!H;VYE('1H870-"F-O=F5R<R!T
M:&4@,C`P+3,U,#`@8WEC;&4@<F%N9V4@=6YI9F]R;6QY+B`@5&AI<R!W;W5L
M9"!N;W0@:6YC;'5D92!S=6-H(&UI8W)O<&AO;F5S(&%S('1H90T*1#$P-"P@
M;W(@;W1H97(@<&5A:V5D(&]R(')E<W1R:6-T960@<F%N9V4@;6EC<F]P:&]N
M97,N#0H-"E1H92`V-34P(&]U='!U="!T=6)E<R!H879E(&)E96X@9VEV:6YG
M(&5X8V5L;&5N="!S97)V:6-E+B`@2&]W979E<BP@=VAE;B!T:&4@=&EM92!C
M;VUE<R!T;R`-"G)E<&QA8V4@=&AE;2P@:70@:7,@<')E9F5R86)L92!T;R!G
M970@=&AE;2!F<F]M('1H92!F86-T;W)Y+B`@5&AE('!E87-T;B!F;W(@=&AI
M<R!I<R!N;W0@#0II;F-R96%S92!T:&4@<V%L97,@;V8@=&AI<R!N;VXM<')O
M9FET(&ET96T@9G)O;2!T:&4@9F%C=&]R>2!B=70@=&\@87-S=7)E('1O=2!O
M9B!B971T97(-"G1U8F5S+B`@5&AE('1U8F4@9F%C=&]R:65S(&UA:V4@86)O
M=70@9FEV92!C;&%S<V5S(&]F('1H97-E('1U8F5S(&%N9"!S:&EP('1H96T@
M:6YD:7-C<FEM+0T*:6YA=&5L>2!T;R!D:7-T<FEB=71O<G,N("!#+D4N(&AA
M<R!A<G)A;F=E9"!T;R!B=7D@;VYL>2!O;F4@8VQA<W,L(&;V8@-C4U,"P@86YD
M('1H96X@86=E<PT*=&AE;2!S;R!T:&%T('1H97D@8V%N(&)E(&EN<W1A;&QE
M9"!I;B!S971S(&%N9"!U;FEF;W)M(&')E<W5L=',@,B]T86EN960N#0H-"@T*
`
end
--IMA.Boundary.599059558--
```

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: w9qje@juno.com (Snaproll Stan)
Subject: A call for papers from all Boatanchor-minded pilots
Message-ID: <19970214.002520.5271.0.w9qje@juno.com>

Greetings all,

I've been a subscriber to the Boatanchor List for about 3 years now and have enjoyed immensely all the heavy radio talk found here. As a result of my involvement I have been able to indulge my love of firebottle communication technology to a great degree. The information gleaned from the list has enabled me to hone my collection of firebottle gear into a respectable ham station of such filament glowing stature that I only dreamed of in my early '60's novice days. I have indeed "arrived".

However, in my never-ending quest for that elusive "baby-boomer" aged yearning for just a little more I am interested in a tying together the combination of the boatanchor era and aviation. Many of you on the list are also pilots, from ultralight to transport category. It is to you I am speaking.

What I am seeking is a forum (via private email) of those of you interested in discussions relating to our common interests of firebottles and flying. I am particularly interested in operating aeronautical mobile with a homebrew firebottle rig currently under construction and would like to know if anyone out there has done such a thing. In addition I would be interested in some plain ol' swapping of your favorite flying tales. Any boatanchor minded pilot worth his salt has got a least a few. Check the archives and you'll see that my favorite postings to the BA list are those where a list member tells us how they got interested in all this firebottle stuff. So your personal flying tales would be of great interest to me. I like the personal touch. Which reminds me, why don't all you lurkers out there jump in and tell us why you like glowing radios so much. Inquiring minds want to know! There's no need to let a few dozen regular posters monopolize the list. As interesting as their posts usually are why aren't the other 600 of you at least introducing yourselves? If I can do it you can too!

Well anyway, to all you flying boatanchor devotees, let's swap some lies. And when we're done, an award will be given for the best lie.

73 y'all and happy flying,
Stan - W9QJE [Long time CFI and ex junior Fed (designee examiner)]

w9qje@juno.com

:-)

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: KB9VU@aol.com
Subject: Re: A call for papers from all Boatanchor-minded pilots
Message-ID: <970214063304_684073360@emout17.mail.aol.com>

Check 6 Stan!

You mean like:

"There I was at 30,000' when the damn thing just quit....."   OR

"There I was at 30,000 feet swapping firebottles in my TX when the damn thing just quit...."

Only trying to determine the level of prevarication required. =^)

73 de Mike, kb9vu@aol.com (X Phantom Phlyer)

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: Kn6di@aol.com
Subject: Re: A call for papers from all Boatanchor-minded pilots

Message-ID: <970214102250_2094003041@emout15.mail.aol.com>

I have 20,000 plus,mid-air,ditched in the Pacific,round the world about 125 times and have flown about 375 types of planes from J-2-DC-2 to B-747
Hank

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: don merz <71333.144@CompuServe.COM>
Subject: Acrosound TO-330's FS
Message-ID: <970214132552_71333.144_DHB35-2@CompuServe.COM>

For Sale

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
412-234-8819 (weekdays, EST or leave a message anytime).
71333.144@compuserve.com

Warning: The following posting contains price information which may not be suitable viewing for anyone except tube audiophiles. Rational purchaser discretion is advised.

NOTICE: The poster of this message hereby disclaims any and all consequential damages resulting from reading this e-mail. Specifically, the poster is not responsible for chairs fallen off of or jaws dropped. Do not read this e-mail if you are subject to any of these conditions.

FOR SALE

Acrosound TO-330 Ultra-Linear Output transformers (matched pair for sale). These are brand new in their original boxes. One box is still factory-sealed. Specifications:

Impedances: 3800 plate-to-plate, 4-8-16 ohm outputs
Power Rating: 50 watts 20cps - 30kcps, 100 watts 30cps - 20kcps.
Response: +/-1db 10cps - 100kcps
Primary Current per Tube: 150ma
Permissable DC Primary Unbalance: 15%
Weight: 14 lbs (each)

These were designed for push-pull ultra-linear 6550's, KT-88's, EL-34's and 6CA7's, or push-pull parallel operation of KT-66's, 807's, etc. The 15 page original manual that accompanies both units shows circuit designs with parts values and complete construction information for all of these designs. Sold only as a set for $875. Offers and trades considered.

FOR FREE (for 3-stamp 8-1/2" x 11" SASE): Photocopy of the Acrosound manual for these transformers. This manual has many other circuits in it and also covers the rest of the Acrosound TO-xxx tramsformers.

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Aligning the Coils on a HQ-100
Message-ID: <UPMAIL03.199702150101360129@msn.com>

Hey, Bill, Roberta and Gang.
Bill, Roberta is right, I shut my eyes when I do the bottom slugs on the Hammurlands and just get a feel for whats right, its not magic but if the coil is stuck, like most of the bottom ones are after XX years., please don't force it. Spray a tiny amount of WD-40 in the top opening, turn the unit on right side up and let it get to temperature and then turn off.
NOW, wait at least a day and try to turn again, if it doesn't turn you will have to remove the coil and drill out the old bottom slug. NOT a easy task as you have to remove the shield can and go in from the top.
Patience is the only suggestion I can give for this ordeal. If you break any of the Litz wire connections you will probably lose some Q (Thanks Hank)
But , Bill you have been on the list for a long time and Iam sure you know what your doing. If you need any help such as spare peice parts, let me know.
I just wish I could Find the Time to get the Old RED DEVIL HQ-145
to go beyond 13 MCS, I know its the Q of the coils I rebuilt.
To many projects, to cold to do any of them.
Later
Your Friend Al
fritsche@msn.com

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: w9fs@juno.com (Jerry W. Daugherty)
Subject: Re: Aligning the Coils on a HQ-100
Message-ID: <19970215.001929.5110.1.W9FS@juno.com>

 <snip>
>it. Spray a tiny amount of WD-40 in the top opening, turn the unit on
>right side up and let it get to temperature and then turn off.
>NOW, wait at least a day and try to turn again, if it doesn't turn you
>will
>have to remove the coil and drill out the old bottom slug. NOT a easy
>task

 <snip>

I'll say! Before you use the drill, you might try something else, This works for me about 90% of the time. Most slugs crack and when this happens as you try to turn the slug it tries to spread apart and against the coil form. This locks it tighter in the coil form, the more force you use the tighter it gets. once you remove the turning pressure the slug goes back together. I have been successful about 90% of the time of getting the slug out using only the tuning wane and a drop of super glue. You have to work from the side the slug is going to come out of. you may want to remove the top slug and work from the top. Also you will need to use the wider shafted tuning wane. What you do is put a thin coat on the end of the tuning wane and before it dries put the tuning wane into the slug then let it set for about 15 min. then remove the slug. You may not want to use the WD40 as it may cause the coil form to expand, I really don't know because I've never use WD40. Another technician I worked with told me it causes the form to expand, this would in effect cause the coil form to squeeze the slug and also make the super glue to not stick.

Good luck

73

Jerry W. Daugherty W9FS, ex K9PFV, W4RXU, W9FTI, DL5GI.
VHF-UHF Nut.   May all your blessings outweigh your needs.

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: "Bill Richarz" <wricharz@transprt.com>
Subject: Another thing n DX-60
Message-ID: <19970213225401.009cf3b1.in@transprt.com>

The cabinate on the DX-60A I have is scratched up somewhat.
How best to restore that? I'm not a painter...Seems I've heard
here that folks take a cabinet to a body shop & have them done.
If so, what can I expect to pay? Guess if you know someone you
could get it for nothing if you buy the paint...and oh yes, what
kinda paint for the DX-60A?

Thanks, Bill, N4DH

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: Brian.Harris@sv.sc.philips.com (Brian Harris)
Subject: Attention Heath Collectors
Message-ID: <304c6920@scs.philips.com>

I have the following item for sale:

HW-17 2 meter AM transceiver circa 1968-69

This unit puts out about 8 Watts. It receives FM from the local repeaters but it is a bit microphonic like Chuck Penson says they all were. It has the original mike. Cosmetically, I would call it an 8.5 or 9. The paint is

nice but has a few small chips that I would touch up. I would not repaint
it, it is so good. The front panel is also good but there is a slight crease
in the speaker grill which I think can be fixed by removing the grill and
unbending the crease. According to Penson, these are VERY RARE. I wouldn't
know. Best offer between $50 and $75 (no more) plus shipping from 75080.

Brian Harris WA5UEK

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: Brian.Harris@sv.sc.philips.com (Brian Harris)
Subject: Attention Military Collectors
Message-ID: <304ad6e0@scs.philips.com>

I have the following items for sale:

BC-457-A

This is serial #81644 by Western Electric covering 4-5.3 MC. There are no
visible mods but there are two holes on the right side of the chassis which
have metal plugs installed (standard?). It is a bit dirty and the aluminum
is oxidized but all else looks good. There are no tubes installed.
$25 plus shipping from 75080.

ARC-5 receiver

I don't know the model number but it covers 190-550 KC. There is a
transformer in a box on the back that looks part homebrew, part original.
There is a toggle switch next to a pot/switch combination that is mounted on
a small plate on the front (standard?). It has 6 tubes installed. The
bottom cover is missing. There are no apparent modifications to the
underchassis components.
$20 plus shipping from 75080.

If you are interested please contact me.

Brian Harris WA5UEK

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: bjacob@iofc.com
Subject: BACK ISSUES OF CQ MAGAZINE AVAILABLE
Message-ID: <199702150420.PAA32213@iofc.com>

-------------- Enclosure number 1 ----------------

::::::::: CQ MAGAZINE ::::::::::

I am offering back issues of CQ magazines for sale. All are in very good to excellent condition.

INDIVIDUAL ISSUES: $2 each (I pay shipping)

BOUND VOLUMES: $32 each (I pay shipping)

::::::::::::::::::::::::::::::::::

1955 -- All 12 issues in original red CQ hard binder.

1956 -- All 12 issues in original red CQ hard binder.

::::::::::::::::::::::::::::::::::

1954 -- July
December

1955 -- January
March
April

1959 -- January
Februrary
March
April
June
August
September
Ocotber
November
December

1960 -- All 12 issues

1961 -- January
February
March

April
May
June
July
October

1962 -- February
March
April
May
June
July
August
December

1963 -- All 12 issues

1964 -- All 12 issues

1965 -- January
February
March
April
June
July
August
September
October
November
December

1966 -- January
February
March
April
May
June
July
August
September
October
November

Please e-mail if interested in any or all of the above.

73s,

Jacob Worthington
K4HJ
Conway, Arkansas, USA

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: km1h@juno.com
Subject: Bird stuff wanted
Message-ID: <19970214.162817.9887.21.km1h@juno.com>

I am looking to buy any Bird Model 4307 Wattmeter and/or any element with the numbers 75- in the beginning of the part #.
Tnx and 73 to all   Carl..........KM1H

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: Brian.Harris@sv.sc.philips.com (Brian Harris)
Subject: Collins Mechanical Filter
Message-ID: <304c60a0@scs.philips.com>

Please help me identify the following Collins mechanical filter:

It is in a black plastic case and is marked:

Collins Mechanical Filter
526-9897-010
Rockwell International
Newport Beach, CA 92663

Thanks for your help.

Brian Harris WA5UEK

new email id - Brian.Harris@sv.sc.philips.com

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: "Rick Blank" <rblank@legend.txdirect.net>
Subject: Re: Collins Mechanical Filter
Message-ID: <199702142209.QAA10100@legend.txdirect.net>

> Please help me identify the following Collins mechanical filter:
>
> It is in a black plastic case and is marked:
>
> Collins Mechanical Filter

> 526-9897-010
> Rockwell International
> Newport Beach, CA 92663
>
> Thanks for your help.
>
> Brian Harris WA5UEK
>

This is an Upper Sideband, 455kHz, Mechanical filter with a 3db BW of 2.1kHz, 60db BW of 6.25kHz, 2.7 kohm in/output impedence unit.

Hope this helps!

Rick Blank, KI5SL   rblank@txdirect.net
2223 Blanco Road   AMSAT NA# 26195
San Antonio, Texas 78212

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: Ronnie Hull <larebel@ms1.nwla.com>
Subject: De-Ox-Id
Message-ID: <1.5.4.16.19970214213909.1aff2b30@ms1.nwla.com>

I picked up a bottle of De-Ox-Id bottled by GC electronics the other day, and it says it is manufactured by chemtrec. Is this the same substance that everyone on the list was talking about a few weeks ago? I have dirty controls in a Ranger and in my .... gulp.... TS430 that I need to clean.

Ronnie - W5SUM

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: heikud@directcon.net (Dennis Heikura)
Subject: DX 60 Meter
Message-ID: <199702150031.QAA22804@zeus.directcon.net>

Hi Gang, Have acquired a Heath DX-60 and am in need of a plastic meter cover or complete meter for same. (Meter is good). Anyhelp would be appreciated.

73==Denny
WB7EGG

===============Real Radios Wear Heathkit

Green=====================================

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: "michael ferraro" <ferraro@sprintmail.com>
Subject: RE: FS..Collins, Collins & Collins
Message-ID: <199702142045.MAA02476@mailgate22>

Thanks to all ....I had an overwhelming response to the items and all items
have been sold......the Vintage Radio Market is alive and very well .....

de k6zsr "mike in montecito"

listen for me on the West Coast AM Net every Wednesday at 0500Z

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: George Humphrey <gah@koyote.com>
Subject: FS: Last two items left.
Message-ID: <1.5.4.32.19970214034203.009e1fdc@mail.koyote.com>

BAers,

I didn't get any offers, so maybe I overpriced these items, or maybe no one
wants them.
Make an offer for one or both.

Two rack mount (19" wide) chassis of telephone equipment by Ledex Control &
Communications Systems.
One is a Auto-Connect Terminal Model 3420, the other a Multi-Function
Controller Model 2204. Both
are sand state stuff I got with the other rcvr and xmtr.

All shipping extra from zip 75440.

Thanks,
73 George KC5WBV
gah@koyote.com

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: George Humphrey <gah@koyote.com>
Subject: FS: McGohan Amplifier
Message-ID: <1.5.4.32.19970214053525.009dbe90@mail.koyote.com>

BAers,

The amplifier is back on the market. Description below. First offer of $25 gets it.

McGohan 20 watt audio amplifier. Two (2) 7868 tubes, one good and one bad. Three (3) 6EU7s all weak but still in the ? range between good and bad.

All shipping extra from zip 75440.

Thanks,

73 George KC5WBV
gah@koyote.com

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: Peter Ferrand <petef@sprynet.com>
Subject: Globe HG-303 signal purity
Message-ID: <3.0.32.19970214033233.006d9974@m3.sprynet.com>

Turns out that my Globe HG-303, which is a nice little novice-type rig, has a nice clean signal on 80 meters when crystal controlled, but a good amount of crud when used with its matching V-10 VFO.

After too much time at this, it seems the problem is simply that the VFO runs at 160 meters, and there's a lot of 160 meters that gets through the rig. I can't measure it accurately but there's a fringe at the top of the scope trace that's about a fifth of the total height of the trace. With the usual 80 meter crystal, the trace is nice and clean. 40 and below seem OK so far.

So I grabbed an MFJ 941 antenna tuner, put it between the VFO and rig, and easily found a position that will also provide a nice clean 80 meter trace and signal, and plenty of grid drive.

OK, fine, problem solved although a bit of nusiance when changing bands.

But is this the way things are 'sposed to be? Last time I played with novice rigs, novices couldn't have VFOs, so this issue never came up.

The HG-303 is a very basic 80-10 meter design with only tubes - a 6CL6 as a Pierce harmonic oscillator driving a 6146. Thus the only tuned circuits in the system are the driver and final plate networks. Grid and plate tuning operate normally.

I'm thinking that as long as the VFO is running on 160 (which I want to keep so I can use it for other possible rigs) there's going to be 160 that gets through. Is this true and did this situation just not bother the original designers or is something wrong?

Oh, has anyone got a "good-enough" mass-merchandised spray paint match to the cabinet of these things?

tnx es 73,
-Pete
WB2QLL
petef@sprynet.com

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: Allen Tucholski <allent@en.com>
Subject: Gonset Communicator III "6 Meter AM rig FS"
Message-ID: <1.5.4.16.19970214143559.2daf66f2@en.com>

Hello All,

I have a very nice Gonset Communicator III 6 Meter AM rig forsale. The rig has been gone over and is ready to plug and play. All new tubes, including the 6L6GC modulator and final. The 2E26 Final has been replaced by a 6146B. This allows about 10 watts out vs the 4 watts nominal out with the 2E26. The original meter is in place, as with the original knobs.The cabinet was repainted by me, and does not have a scratch.
The front panel is excellent, with only a little of the lettering worn by the tuning knob.
The rig uses the standard 8 mhz xtals.

This was my own personel rig for the past few years. It works great.
All you will need is a mic and xtal and you are on the air.

Includes Manual and power cord.

$85 Plus shipping from Cleveland Ohio

Its about 20 lbs

Allen
KB8MTZ

.

NASA Lewis Reasearch Center
Cleveland, Ohio

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: w4bld@juno.com (Robert B. Kerby)
Subject: Gonset Posts (FS)
Message-ID: <19970214.173127.5063.0.W4BLD@juno.com>

Will the people who had the 6 meter rig and the converter please e-mail me. I lost all mail in a power glitch just as I was about to answer your posts. Thanks, Bob   I want both pieces of gear.
Robert B. Kerby   -I collect Gonset, Elmac, Lysco, and Morrow-
Post Office Box 991 (UPS ADDRESS: 231 Rosser Avenue)
Waynesboro, VA 22980   (540) 942-4356   w4bld@juno.com

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: rhys@ix.netcom.com (Lawrence D. Walken)
Subject: Gonset Super-Ceiver Accessory
Message-ID: <199702141827.MAA09011@dfw-ix16.ix.netcom.com>

Hi Gang --

Here's an odd find. A local fellow's got something call a Super 6 which as far as I can reckon is some kind of converter for a Gonset Super Ceiver. Anybody know what this thing is or want it. If so I'll make an offer to the holder of said item for you. It's a tiny box with a few antenna sockets.

This is either going to be a total orphan or 16 people will call back to say they've been looking for one for years.

Besides the glow of the tubes and the mysterious invisible waves coming from far far away this is absolutely what I love about the boatanchor biz.

Larry Wolken N3OJD
(202) 291-9303

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: "James C. Owen, III" <owen@piper.eeel.nist.gov>
Subject: RE: Gonset Super-Ceiver Accessory

Message-ID: <54767.owen@piper.eeel.nist.gov>

In message Fri, 14 Feb 1997 12:31:04 -0600 (CST),
rhys@ix.netcom.com (Lawrence D. Walken) writes:

> Hi Gang --
>
> Here's an odd find. A local fellow's got something call a Super 6
> which as far as I can reckon is some kind of converter for a Gonset
> Super Ceiver. Anybody know what this thing is or want it.

Well Larry that's quite a find. Actually there were quite a few made. It was a converter that you installed in the antenna line of your AM auto radio connected it to 6V (the 12V version was the Super 12) and your had all the hambands converted to about 1 Mhz if I remember correctly--AM only of course. A handy thing to have nowdays if you have an AM radio you want to convert. 73 Jim K4CGY

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: Mike Warren <m_warren@compuserve.com>
Subject: re: Halli FPM-300
Message-ID: <199702140720_MC2-113C-1EC9@compuserve.com>

Hi Bob,

The FPM-300 "Mark-II Safari", originally made 1974-77 and sold for $625. Was a replacement for the original FPM-300 made from 1972-74. Current value (according to Dachis) is $175-300. Has only two tubes - a 12BY7 driver and a 6KD6 PA. Covers 80-10 CW/SSB, 250 watts PEP SSB, 180 watts CW. Options are HA-60 cooling fan and MR-300 mobile mounting kit.

(from "Radios by Hallicrafters", Chuck Dachis)

73,

Mike W5MAZ (in MN)
m_warren@compuserve.com

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: "Walter Fairclough" <wfairclo@netcom.ca>
Subject: Hallicrafters Pieces Wanted
Message-ID: <199702142251.RAA25910@tor-srs1.netcom.ca>

I am looking for a Hallicrafters desk microphone with PTT and lock-on features circa late 1950s. Its to go with my newly acquired HT-44. To complete the station I am also looking for the HA-8 Splatter Guard and a HA-1A T.O. Keyer or HA-4 T.O. Keyer.

Please email condition of units and price.

Thanks for reading.

Walter Fairclough
Manotick, Ontario
wfairclo@netcom.ca

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: bdhall@ghg.net (Benjamin D. Hall)
Subject: HB Fuses for sale
Message-ID: <3304E2B1.5429@GHG.net>

Hiya folks, finally got down to EPO and here is the dish on the HV fuses. Seems that it takes an act of Congress to get anything done these days, heh heh heh...

3/4 amp 2500V, mfd by Littlefuse Inc. USA, measures almost 4 1/2 inches long, 3/8 inches in diameter.

2 amp, 3000V, mfd by Littlefuse Inc. USA, measures almost 5 1/2 inches long, 3/8 inches in diameter.

So, here is the deal. Electronics Parts Outlet wants $0.50 each for them. I'm willing to pass them along for $1.50 each, which will cover my postage and envelope cost, plus a little for my time and gas.

They have probably about 20 of each, so plan accordingly. I didn't buy the whole kit'n'kaboodle as I'm in one of those cash-poor cycles right now...

Thanks and 73,
Ben
--

```
----------------------------------------------------------------------
 From the computer of            | Collector of fine firebottle
 Benjamin D. Hall, Houston Texas | equipment, as well as other things
 BDHall@GHG.net (home) -or-      | involving Earth, Air, Water, and
 Benjamin.D.Hall1@JSC.NASA.gov   | Fire.
---------------------------------------------------------------------
```

PLEASE NOTE MY NEW HOME E-MAIL ADDRESS above. My old address, BDHALL@GHGCorp.com, will still work for a period of time however.

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: KG9IL@aol.com
Subject: Heathkit HW and SB low power out.
Message-ID: <970214102013_474670781@emout18.mail.aol.com>

I have owned several SB and HW series transceivers and have noticed a big difference in their power out levels on SSB. I have swapped tubes and microphones and still get the same results. One rig will run 110-120 watt voice peaks while another struggles to 50-60 watt peaks. I have done a visual inspection and can find nothing substantially different between the rigs. Unfortunately, I do not have a scope to go stage to stage. Wondering if this is a common problem or if I'm off my rocker!!

Any advice greatly appreciated....Kevin...KG9IL

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: Conard Murray <ws4s@InfoAve.Net>
Subject: Re: Heathkit HW and SB low power out.
Message-ID: <2.2.32.19970214171629.00b5df88@infoave.net>

Hi Kevin and the group,
I have noticed the same thing with a pair of HW-18 radios we had in the CAP squadron I was in. One rig was good and the other was fantastic. I swapped the power supplies and did voltage comparisons and some tube swapping/replacements to no avail. Power output was within 20 watts or so, but the difference in receive ability was the deal here.
Thinking about it now, I wonder if it might be problems in the crystal filter?
73,
Conard

```
.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.
. Conard Murray  WS4S    Glowbugs listowner .
.  217 Dyer Avenue        ws4s@infoave.net  .
.   Cookeville, TN  38501  615-526-4093     .
.    <><  Wise men still seek Him  ><>      .
.                 QRP-L # 993               .
.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.
```

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: "James C. Owen, III" <owen@piper.eeel.nist.gov>
Subject: RE: Heathkit HW and SB low power out.
Message-ID: <51299.owen@piper.eeel.nist.gov>

In message Fri, 14 Feb 1997 09:22:02 -0600 (CST), KG9IL@aol.com writes:

>
> I have owned several SB and HW series transceivers and have noticed a big
> difference in their power out levels on SSB. I have swapped tubes and
> microphones and still get the same results. One rig will run 110-120 watt
> voice peaks while another struggles to 50-60 watt peaks. I have done a
> visual inspection and can find nothing substantially different between
> the rigs. Unfortunately, I do not have a scope to go stage to stage.
> Wondering if this is a common problem or if I'm off my rocker!!
> No this is not a problem common the the rigs I have worked on. ANY SB/HW rig even the HW12-22-32 single banders will if tuned properly put out in excess of 100 watts. In fact 125w on 75-40-20 and a little less on 15 & 10 is the norm. Less than 100W output is due to either bad finals, lack of drive or incorrect voltages. I need to know which rigs you are using as the -100 series is different from the 12-22-32 series. The 12-22-32 could be wired to run from 250V or 325V Low voltage DC where the -100 always ran from 325V. The power supply's could also be set up to 250 or 325 V. You could have one unit running from a PS set for 250 and the other from a PS set for 325--if the rigs are the -100's then the one with 250V would be about 60 watts out. With the SB series it's easy to tell if you have enough drive, switch meter to grid current (meter is 1ma full scale) if you can get greater than .5 ma grid current then you have enough drive to get 100w output and you have a problem in the finals. If < than .5 ma then you have low gain somewhere and an alignment might fix it. Check the screen voltage on the 6146's, there's a dropping resistor from the 325V LV B+ that sometimes changes value. Also as I remember there are 2 large power resistors on the back right ckt board (1 is the screen resistor) that look the same but have a different value. I've seen them switched when under construction and this changes the screen voltage to the 6146's. All in all I don't think you have a major problem but it will take some trouble shooting to figure where the gain has gone. BTW an alignment, once you have it down, can be done in 15 minutes or less if there is no problem in the rig. Let me know what you find Kevin and if I can be of any additional service. I cut my teeth on these rigs and know what they can do. 73 Jim K4CGY

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: Bill Meara <wmeara@erols.com>
Subject: Help!: HQ-100 alignment
Message-ID: <199702141045.FAA29112@smtp3.erols.com>

Hammarologists:

I continue to work on my old HQ-100 and have made great progress. Art Bell's show is coming out of the speaker right now (no UFO's sighted yet). A while back I asked the group a few questions about fixing up and operating

HQ-100's... I still need a little advice:

I'm now ready to do the RF alignment, but I need some info on those wierd RF cans with two slugs both of which are accessed from above. I can see the top slugs and have a dip stick to turn them, but where are the bottom slugs? How far down? How do you know when you're turning the bottom one? Do you use the same size alignment tool for top and bottom adjustments? If the dial calibration is about right, is there any need to mess with the HF oscillator adjustments, or should I limit myself to peaking the tuned circuits in the RF amp grind and plate circuit?

I know that twisting these things is a hazardous business so I need some advice on how to proceed.

My HQ-100 manual describes how the crystal calibrator can be converted into a BFO by putting a 455 khz crystal in place of the 100Khz rock (and then coupling the calibrator output in to the IF strip). The idea seems to be to take advantage of the narrow, pre-oscillation IF skirt coming from the Q multiplier (while using the calibrator cum BFO to beat the incoming CW/SSB signal). Anyone have any experience with this kind of arrangement?

Now that I've got the IF and Q multiplier stages aligned, it is fun to use the Q multiplier/BFO arrangement. I've never used one, but I imagine this is similar to using an old regen receiver.

Anyone have one of those little clips that hold the 455 khz cans in place? I could use one.

73 De N2CQR
Bill Meara
Hallicrafters, Heaths and Hammarlunds
QTH: Falls Church, Virginia, USA
Formerly of Tegucigalpa, Bilbao and Santo Domingo
wmeara@erols.com
http://www.mindspring.com/~johnmb/billm.htm

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: Re: Help!: HQ-100 alignment
Message-ID: <Pine.SUN.3.91.970214072546.12976A-100000@indy2>

Hi, Bill (et al)!

For those "tuned from the top" IFs, with only one hole though which to get to the slugs, the proper tool is an odd-looking thing--it's got an allen-wrench shaped end of perhaps 1/2" length, and a round shaft of smaller diameter from there back a goodly distance, then it fattens out a bit.

Using it, you find the bottom slug by feel. They are a little bit flexy (the tools not the slugs!), so you find the top one as the allen-ish end slips in, and sort of rock the tool to be sure; then go on past that gently 'til the thing engages the bottom slug. Sometimes it helps to close your eyes (or am I the only person who does this when working by feel?).

Get a couple of the adjusters, and don't try to force stuck slugs with 'em, as they are not very strong. Unsticking bottom slugs is risky--a *tiny* amount of WD-40 may help but tough cases will require removal and disassembly of the can.

73,
--Bobbi

(Yesterday's big fun: spent my entire lunch break doping out and rewiring a nice 300-series desk phone (late '30s design), only to discover it's got the wrong dial! Not enough muting contacts--it can be set up to dial semi-right while clicking madly in one's ear, or mute nicely but not dial. Time to get the right part! ...Anybody want a dial suitable for a candlestick or "woodwall" phone?)

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: Jack Harper <jharper@bs2000.com>
Subject: Re: Help!: HQ-100 alignment
Message-ID: <199702141953.MAA24595@lynx.csn.net>

At 04:45 2/14/97 -0600, you wrote:
>Hammarologists:
>
<snip>
>
>I'm now ready to do the RF alignment, but I need some info on those wierd
>RF cans with two slugs both of which are accessed from above. I can see the
>top slugs and have a dip stick to turn them, but where are the bottom
>slugs? How far down? How do you know when you're turning the bottom one?
>Do you use the same size alignment tool for top and bottom adjustments?   If
>the dial calibration is about right, is there any need to mess with the HF
>oscillator adjustments, or should I limit myself to peaking the tuned
>circuits in the RF amp grind and plate circuit?

Going through the same process (still -- slow progress 1200-0200 a night or two a week) with my HQ-180, I have learned a thing or two...

What has worked for me is the following:

(1) I hosed down the can 'innards' with wd-40 and let it sit for a few days and then VERY carefully broke the slugs loose -- it took a bit of torque on some of the slugs and now they all turn quite freely -- not THAT much torque though. Few things worse, I think, than breaking one of those slugs. In my case, most of them were rather set -- on several, I had to twist to where the alignment tool flexed perhaps 1/8 of a turn before the slug would break free. With a couple of slugs, I had to hose them again with the wd-40 and wait a few days and then they loosened. Be careful and very very patient.

(2) I bought a good quality set of tuning tools at my local favorite BA Haunt (Fistell's Electronics in Denver) -- those wretched plastic things you get at Radio Shack are terrible and wear out instantly until all you have are red plastic 'tools' that just freely turn... Useless. Get yourself a good set made out of some kind of like fiberglass type stuff. The old Handbooks (circa 1935) mention that 'good' alignment tools are/were made from 'bone'? My set (for about $10) has something like 10 tools of various diameters etc.

(3) The alignment instructions in the Hammarlund manuals (for the '180) are quite vauge/misleading in more than one place -- which threw me off track more than once. I finally figured out to not just blindly follow the instructions but rather to simply use them as outlines -- look at the schematic which will tell you if the particular can you are working on really has one or two slugs -- and which slug to turn (top or bottom). Best that I can tell, at least on the '180, on the schematic, a can with two slugs on the schematic is correct in that the 'top' slug on the schematic is, in fact, the top slug in the can (same for 'bottom'). Also -- you can verify the can from the schematic (at least with the 180) as in the bandswitch part of the schematic, the lowest band is always at the top on the drawing and works down to the highest frequency band at the bottom of the drawing. On the '180, a couple of the transformer cans are misidentified in the photographs -- I finally figured that out by watching slugs turn with no effect at all -- Finally gave up and xerox'd the line drawing of cans/tubes and carefully identified each one from the schematic and the physical location of each on the chassis.

(4) With a bit of practice you can easily feel the top and bottom slugs with the alignment tool. On the RF alignment, with the '180, you need the alignment tool that looks kinda like a small Allen wrench thing -- long narrow thing with a octagonal end -- insert the tool into the top of the can carefully until you feel it penetrate the first/top slug. Wiggle it around and gently push it on through -- you can tell when you are inside the top slug as by gently appling twisting pressure on the tool there will be resistance from the slug (all this reminds me of an old girlfriend -- but then, thats another story). Keep gently pushing and wiggling -- eventually the tool will pop through the top slug and suddenly you will be able to twist the tool with no resistance -- you are now between the top and bottom

slug. Keep pushing and twisting -- you will feel the tool begin to penetrate the bottom slug by resistance to twisting. Get the tool into the slug (feel where the mid-point is -- put the tool there to minimize (hopefully) the chance of breaking the slug. Once you have done this a few times it is very natural and you will be able to easily tell where you are by the feel. Having a good set of alignment tools is very important. Note that I have found that it is best to adjust the RF cans (top and bottom slugs) only from the top of the chassis as you don't have to penetrate the maze of wiring on the bottom of the chassis and also don't have to worry so much about being zapped by the B+ etc.

(5) I have found that on the lower frequencies you might need to make a number of turns -- higher frequencies are quite sharp with a very narrow 'peak'. Watch out for the end -- where the slug will not turn anymore--

(6) Lotza patience -- don't rush things.... Expect it to take a few evenings (at least for me)... Expect to have to do the alignment a number of times before you really get it right (at least for me -- next time will be hopefully a lot easier).

Once you get used to turning those slugs itz easy -- kind of like parachute jumping -- the first time is kinda scary... I suggest a rum and coke prior to the first turning.

Regarding 'leaving things alone' -- Once I got used to turning the slugs and realized that I could actually make things better, I have tweaked everything and am trying to get the '180 into really top-notch alignment. I have never done this before and it has been really a lot of fun at 0200 -- especially with that rum and coke.

The main worry that I had at the beginning is that it would be a 'one-way street to oblivion' -- adjust a slug and everything would go south and I would never be able to get it back. That has, to my delight, not been the case -- I have not totally messed up the '180 -- it is infinitely better than when I started. Good Stuff.

>

>73 De N2CQR
>Bill Meara
>Hallicrafters, Heaths and Hammarlunds
>QTH: Falls Church, Virginia, USA
>Formerly of Tegucigalpa, Bilbao and Santo Domingo
>wmeara@erols.com
>http://www.mindspring.com/~johnmb/billm.htm
>

Best of Luck!

Regards

Jack, KC0LR (Friend to all things Hammarlund)

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: rhys@ix.netcom.com (Lawrence D. Walken)
Subject: Hickok 288X Sig Gen Manual
Message-ID: <199702142004.OAA21812@dfw-ix14.ix.netcom.com>

Hi Gang --

Cleaning up and ran into an original manual for a Hickok signal genrator #288X (also 277 & 277X). Anybody wants it let me know and send $5... you got it.

Larry Wolken N3OJD
  (202) 291-9303

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: "Bill Richarz" <wricharz@transprt.com>
Subject: Re: Info On Hallicrafters
Message-ID: <19970213225400.009cedd0.in@transprt.com>

 04:46 PM 2/13/97 -0600, you wrote:
>Hi all,
>
>A friend of mine just got a Hallicrafters Transciever that no one around
>here has heard of before. It's a model FPM300 "Safari". It appears to
>be from the 60s (?) with tube driver and finals.
>
>If anyone has any information regarding this guy, please let me know.
>
>73 de Bob/KB2SGM

Bob, as it shows in my Yellow Sheet's "Ham Equipment Buyer's guide" (equipment from 1945 to 1972), it was made in 1972. For fixed portable or mobile use. Covers 80-10 meters in 600KHz bands. Self contained 117/234 V 50/60 AC & 12 V DC universal power supply. Compact 5.5x12x11" 25 pounds. Has built in speaker, AALC for 12db compression, AGC, 25KHz crystal calibrator. USB, LSB, CW or RTTY. 250 Watts PEP SSB input, 180 watts CW. Power output 125 Watts PEP ino 50 ohms. Rcvr sensitivity

1 uv for 15 db SN ratio. Selectivity 2KHz. Has break-in-CW, semi-automatic, CW sidetone. Solid state. Optional Accessories: MR-300 Mobile Installation kit, HA-60 fan kit. Price class $595,

Hope this helps, think I've seen one of these before.

73 de Bill

```
=========================================================================
Bill Richarz <N4DH> ex WA4VAF      | Internet: wricharz@transprt.com
10035 Little Creek Rd.             | Packet: N4DH@W4BFB.#CLT.NC.USA.NA
Charlotte, NC 28227                | Phone: (704) 545-9368
HomePage                           | http://www.transprt.com:80/wricharz
=========================================================================
```

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: Ronnie Hull <larebel@ms1.nwla.com>
Subject: Johnson Relay Plugs
Message-ID: <1.5.4.16.19970214190101.2d0fbd04@ms1.nwla.com>

Howdy Ya'll

I read, with interest, the recent posts about plugs to fit on the back of Johnson equiptment, to power t/r relays. I went to radio shack and purchased the 300 ohm twin lead plugs as suggested. They don't fit my Ranger or Ranger II. The pins were too large. I guess I could have pounded them in, but I didn't want to do that.

so, I remembered that years ago while I was a parts clerk at Southern Electronics here in Shreveport, that we had sold these same plugs, made by Moseley of all people. I went up to Southeren and sure enough, they still had some though very very covered with dust. Same thing, they are too large.

So, what to do? Find a crystal and turn it into a plug? Or, just build up solder on wires and force them into the sockets?

Anymore suggestions fella's?

by the way, I recently acquired some brand new ceramic crystal holders of the same style, and neither of the plugs will fit them either.

Ronnie - W5SUM

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: w2ec@VNET.IBM.COM
Subject: KWM-2A Audio cutout
Message-ID: <199702141533.JAA25656@uro.theporch.com>

I have a KWM-2A that is experiencing very brief (on the order of 1/10 of a second or less) cutout of the audio. I'll be getting normal audio levels, and then for just a split second, the sound goes completely dead, then pops back on. It's so brief I don't even lose the jist of the conversation, but the blanking effect is there. It's almost like there is a squelch circuit active or maybe a noise limiter (none installed) that is cutting off the audio. Any ideas? Sounds like a cap (there have been several other caps marginal in this unit) but thought I'd ask the experts here first if there are any other ideas.

73, Ray W2EC

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: jkh@lexis-nexis.com (John Heck)
Subject: Re: Let us ask: Where did the MFG equiptment go?
Message-ID: <9702141422.AA17750@beans.lexis-nexis.com>

Folks,
In recent weeks a thread was going for some time about hombrew vacuum tubes. As I recall it got started as a discussion about the legendary poor but resourceful young ham who put together a rig built entirely from homebrew parts. I seem to recall that this story was included in "200 Meters And Down" and originated in some issue of QST in the twenties. Some heated discussion in our group quickly devided into two camps, the "it can't be done/it's BS" group, and the "wow! let's try it/how can we get it done?" group. The former folks argued that the techniques available to the home technician were too crude to produce an acceptable tube, and after some discussion about vacuum techniques, the thread died out. Now I'm not trying to beat a dead horse, but there has been an interesting thread of a similar nature going on in rec.antique.radio+phono, which some of us follow, about the disposition of all the old tube manufacturing equipment. Where did it go and could somebody find some and begin making limited runs on popular tubes? The attached letter is a very interesting addition to this thread
which I thought many would enjoy.

In addition, I have recently been reading some back issues of "The Old Timers Bulletin", from the mid '80s, in which an English professor and wireless collector/hobbiest has been producing vintage design vacuum tubes in his lab and using them as souvineers and to produce working replicas of vintage '20s and teens radios. I should have waited to write this letter so as to be able to give a citation of the OTB I have seen this in, but I will do so on Monday next. The point is, however, that it IS possible to homebrew acceptable vacuum tubes to produce simple QRP type radios. As a matter of fact, many of the early receiver tube were made deliberatly "soft" (poor vacuum) so as to increase their "sensitivity" over "hard" tubes of the same design. I conclude that anyone who has a real interest in homebrew tubes should be able to achive at least limited success, with reasonable equipment, in his basement. To me, anyway, this seems like a heck of a neat project. I would sure like to try this myself or certainly to follow someone else's work in this area.

Regards,
John Heck, KC8ETS
1009 Donson Drive
Dayton, Ohio 45429
(513)865-7036(work)
jkh@lexis-nexis.com

----- Begin Included Message -----

In article plf@news-e2d.gnn.com, MikeHw@gnn.com (Mike) writes:

>Some of the equipment went East. During a visit to a Chinese tube maker a
>couple of years ago, I saw bits of equipment made in the UK, US, Germany and
>Eastern Europe, though most of the equipment was Chinese.
>
>The vast majority of Western equipment was probably just scrapped. We are
>fortuanate that most western tube makers were actually rather slow to wind
>down production in the face of the coming of the transistor. Thats why we are
>left with such good inventories of the vast majority of tubes still in use.
>
>I regret now that I didn't take a video or even a camera on that visit. The
>manufacturing process is extremely interesting. I actually took along a
>1920's British triode, a DA30, and asked how much to put it into production.
>After the laughter died down, my hosts commented that if I could give them an
>order for 50,000 a year they could 'have a look at it'. I was told later by
>one of the younger engineers there that they get all sorts of requests, and
>that I was yet another 'crazy foreigner' wanting to make 'antiques'.
>
>The serious point is, I think, that the markets are simply not there to

```
>support production of old tubes by current tube manufactureres. Its a bit
>like asking a light bulb manufacturer to start remaking carbon filament
>lamps. Why? There is no market left, and there are modern production tubes of
>much better performance from the manufacturers perspective.
>
>Even with the tube audio revival, we will be lucky to see a few 'old tubes'
>go back into economical (at a price we would want to pay) production on small
>lines. Perhaps WE300B's are a worthwhile proposition, and I believe sources
>are being opened up.
>
>We have to bear in mind that a weeks mechanized production of 45's would keep
>us all going for the next century or two!
>
>Having said all of that, what I saw was highly mechanized volume production.
>I would be interested to know how some of the very small US tube makers of
>the 1930's (and there seem to have been many) actually went about tube
>making. Perhaps they were not very mechanized, and produced in small batches
>off multi-purpose tooling. Perhaps, if price wasn't a consideration, this
>would be the way to make a few hundred at a time of the less complicated but
>sought after tubes of the 20's and thirties.
>
>Mike
>
```

----- End Included Message -----

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: tomrice@netcom.com (Tom R. Rice)
Subject: Livermore (CA) Book Bargain!!!!!!!
Message-ID: <199702150145.RAA05929@netcom4.netcom.com>

There's probably someone on these lists who lives near Livermore, CA, and would like a better-than-average-condition copy of Langford-Smith's Radiotron Designers Handbook, 4th Edition, for the princely sum of $5.00.

As of 1500 on February 14th, such a bargain was observed on the shelf in the back right-hand corner of Basset Books, 212 So. L Street, Livermore. (Phone 510-371-6280)

I'd a bought it, but I have my old copy from the days when I was working on my First Phone ticket. I did, however, find a copy of Marcus & Levy, "Elements of Radio Servicing", 1947, which has more dope on the AA-5 and car radios of the time than one could ever want to know. (Who could possibly want a schematic of a Motorola 103K1 receiver?)

Good things in surprising places......

73 de WB6BYH

--
"Start off every day with a smile and get it over with." --W.C.Fields
Tom R. Rice
tomrice@netcom.com
CIS: 71160,1122

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: "Gary H. Harmon, Jr." <gharmon@txdirect.net>
Subject: Meters Cheap
Message-ID: <199702150009.SAA24041@legend.txdirect.net>

As I was looking through boxes of stuff for some "big ticket" (HA) items to take to the Smithville hamfest tomorrow I ran across 4 meters that maybe someone can use. $1 ea plus postage.

3 1/2"/round/Simpson/0-50 ac ma/cracked glass

2 1/2"/round/GE/0-15 ac dc

2 5/8"/round/Burlington/0-50 dc........I thought they had a coat factory :)

3 1/2"/round/Triplet/0-200-0 dc ma

73,
gary

```
<><><><><><><><><><><><><><><><><><><><>
<> TOO MANY PROJECTS, NOT ENOUGH TIME <>
<>                                    <>
<>    Gary H. Harmon, Jr., K5JWK      <>
<>        6302 Robin Forest           <>
<>    San Antonio, TX 78239-3218      <>
<>          (210) 657-1549            <>
<>       gharmon@txdirect.net         <>
<>                                    <>
<>PACK & SHIP UNTO OTHERS AS YOU WOULD<>
<>   HAVE THEM PACK & SHIP UNTO YOU   <>
<><><><><><><><><><><><><><><><><><><><>
```

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: radiobwn@riconnect.com (Christopher A. Bowne)
Subject: N2KSZ - Silent Key
Message-ID: <199702141120.3571700@RIconneCT.com>

I have the sad duty to report the untimely passing of one of the the East's most devoted BA collectors and operators - Dave Smith, N2KSZ, of DeKalb Junction, NY.
I received the news from Dale, KW1I last night, that Dave was killed in a farm equipment accident on his dairy farm on Tuesday.

Dave was a very active AM operator, especially on 160 meters, and a regular on the Old Military Radio Net. We will all sorely miss Dave's booming BC-610 signal.

I will pass on additional details as they become available. Anyone who wants to participate in an on-air rememberance of Dave is welcomed to check into the Old Military Radio Net tomorrow (Saturday, Feb 15th) morning, starting at 0500 on 1995 kc.

73,

Chris Bowne, AJ1G
Stonington, CT
radiobwn@riconnect.com

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: sulonen@eskimo.com (Kevin Sulonen)
Subject: National NC-183D dials
Message-ID: <af2a531b00021004c2e3@[204.122.22.239]>

<<Hope this is the right way to mail to the list!>>

Hi all. I'm new to this list as of yesterday (and soon to be a dues paying one, I'm sure -- this is great stuff).

I have a 1952 (pretty sure) NC-183D that someone left in a sunny place for awhile. The material that the tuning dials (and the face of the S-meter) are made of has some orange-ish patches where the dials were parked and general discoloration due to age/heat (I believe). I wouldn't have a problem with this at all except for the fact that a significant amount of the labelling on the dials is _red_. Needless to say, the red markings are difficult to read.

Is this a dead pony? Or is there some way to bleach out this discoloration without damaging the markings on the dials? Is there a source for well-done replica pieces? Is this an old, tired subject that was a great source of email-flames in days gone by?

I'd appreciate your comments.

73 de KC7THO (Kevin)

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: Scott Robinson <spr@earthlink.net>
Subject: Odd IFcans (was National IF can, an oddity)
Message-ID: <3304C422.71BF@earthlink.net>

Folks,

I posted yesterday that I had a Philco AM/SW entertainment receiver that had an extra primary on its IF output tranformer,and that this winding was connected from B+ to the screen of the tube. What I did not know at the time was the phase of this winding, and so could not tell if it iuntroduced negative or positive feedback.

I fired up my 'scope (Tek 2236, for those interested) and measured. The screen and plate voltages are out of phase, so this is as I suspected a positive feedback winding. The screen RF voltage is only about 1/10 of the plate voltage. What this does is raise the output impedance of the tube, raising the Q of the IF tranformer and adding a bit of gain.

I've also seen this circuit in a 1946 vintage Philco tube portable. I'll have to look at the IF bandpass characteristic to see if they have done something extra clever here with that as well.

Regards,

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: Dan Kerl <dlkerl@ro.com>
Subject: Re: Odd IFcans (was National IF can, an oddity)
Message-ID: <3304D7A5.384E@ro.com>

Scott Robinson wrote:
>
My Scott SLR-12B has an extra winding in each IF can. They are connected to selectable resistors, which are selected by the front-panel bandwidth switch. This technique reduces Q, widening bandwidth, by dumping some of the tuned-circuit stored energy in the selected resistor.

Dan Kerl
dlkerl@ro.com

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: "Lawrence R. Ware" <lrware@pipeline.com>
Subject: Oddity National IF can, How's it really work?
Message-ID: <3.0.16.19970213215248.0a4f5832@pop.pipeline.com>

In ref. to my previous posting(s) on the odd modified IF transformers in my RCP receiver:

A number of people have replied both publicly and via private e-mail concerning the function of the tertiary winding...

While no consensus has yet appeared on how/why it works,
What it does seems to have some consensus:

Spoils transformer "Q" is the current majority opinion, with improving selectivity a secondary opinion.

Hummm, am I the only one who's getting confused?
Several people pointed to references including ARRL handbooks,
Radiotron 4th (pg. 1025 to 1050) etc...

I've also found applicable info. on pages 413-421, and 423-425 of the radiotron 4th.

Alas the Radiotron 4th ed. references Grovers 1946 work no less than 12 times in all three sections... :-(

This is starting to get interesting...
OK guys if we assume it's just breaking the magnetic lines of

flux to spoil the "Q," that's one thing, but what happens if we instead look at it as "link" coupling from one side of the transformer to the other with a single point grounded? Does it now improve the *overall* "Q" of the circuit when looked at as a bandpass filter?

-Larry Ware
lrware@pipeline.com
Orlando, Florida

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: wpul1130 <wpul1130@concentric.net>
Subject: ORLANDO HAM FEST
Message-ID: <33046775.1AE8@concentric.net>

Greetings All: Is there anyone going to the Orlando (Fl) Ham Fest, and which day. I plan to go, will have to be Saturday or Sunday, hope to be there Saturday.
I am in a Boat Anchor buying mood.
73's
Lloyd

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: eb5agv@ctv.es
Subject: R-390A with SPC-10 ?
Message-ID: <1.5.4.16.19970214115108.4507b716@192.168.0.1>

Hi firebottle keepers!

Well, this is a sort of continuation of my previous posts about the SP-600-JX and SPC-10 (by the way, due to transport trouble in Spain, I have not received them yet :-( ). I have also a R-390A and I wonder if it could be easily connected with the SPC-10 and, if so, how does it performs. I know the HC-10 could be connected to the R-390A, but as the SPC-10 is intended (as far as I know) to work with the SP-600, I wonder if there is any trouble making the R-390A connection. Any experience or hint about that matter will be welcomed!.

Thanks!

JOSE

----
  73 JOSE V. GAVILA (EB5AGV / EC5AAU)

46910 Benetusser - Valencia
SPAIN

QTH locator: IM99TK

*** PLEASE, VISIT MY HOME PAGE AT : ***
http : //www.geocities.com/SiliconValley/6992
e-mail: eb5agv@ctv.es & eb5agv@amsat.org

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: "Grant Youngman" <nq5t@gte.net>
Subject: Re: R-390A with SPC-10 ?
Message-ID: <199702141211.GAA03586@smtp.gte.net>

>. I have also a R-390A and I wonder if it could
> be easily connected with the SPC-10

The HC-10 and SPC-10 are identical functionally and virtually identical electrically. They can be used interchangeably. Either unit makes an excellent SSB adapter for the R390A.

Grant/NQ5T

Grant Youngman / NQ5T

nq5t@gte.net
http://home1.gte.net/nq5t/index.htm
Double Oak, TX -- nr Dallas

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: "Mark Glusker" <glusk@mechcad3.engr.sgi.com>
Subject: Re: R-390A with SPC-10 ?
Message-ID: <9702141042.ZM11575@mechcad3.engr.sgi.com>

Grant writes:

> The HC-10 and SPC-10 are identical functionally and virtually
> identical electrically. They can be used interchangeably.

I am not sure that is entirely true.

The SPC-10 was made to go specifically with the SP-600 receiver. As I
recall, the IF output levels on the SP-600 are much higher than the HC-10
can tolerate and a direct connection can damage the HC-10. I believe an
old Hollow State Newsletter recommended a resistor in series if using an
HC-10 with the SP-600. I can confirm that the HC-10 works very well with
the R390A as is. I don't know if the IF output level of the R390A is
sufficient to drive the SPC-10.

--
Mark Glusker, glusk@sgi.com

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: "Rick Blank" <rblank@legend.txdirect.net>
Subject: Re: R-390A with SPC-10 ?
Message-ID: <199702142212.QAA10463@legend.txdirect.net>

> Grant writes:
>
> > The HC-10 and SPC-10 are identical functionally and virtually
> > identical electrically. They can be used interchangeably.
>
> I am not sure that is entirely true.
>
> The SPC-10 was made to go specifically with the SP-600 receiver. As I
> recall, the IF output levels on the SP-600 are much higher than the HC-10
> can tolerate and a direct connection can damage the HC-10. I believe an
> old Hollow State Newsletter recommended a resistor in series if using an
> HC-10 with the SP-600. I can confirm that the HC-10 works very well with
> the R390A as is. I don't know if the IF output level of the R390A is
> sufficient to drive the SPC-10.
>

I've got an SPC-10 and the 390A will definately drive it! Sometimes
almost too much so....

Rick Blank, KI5SL   rblank@txdirect.net
2223 Blanco Road   AMSAT NA# 26195
San Antonio, Texas 78212

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: Robert Fowle <hammarlund@jacksonmi.com>
Subject: Re: R-390A with SPC-10 ?
Message-ID: <3305300F.4ACF@jacksonmi.com>

Rick Blank wrote:

> > The SPC-10 was made to go specifically with the SP-600 receiver.

gang, the above statement is true...it was designed to take the high IF
output..the HC-10 however *does* need a 600 ohm resister in series with
the IF output of an sp-600, or you will blowout the input coil in the
HC-10..the HC-10 will work fine as is with the R-390A reciever...

FWIW
Robert
--
**** Visit my Web Page.....****
===]-[->
Robert Fowle   KC8DBC
1215 Winifred
Jackson, Mich. 49202-1946
Ph. 517-789-6721
E-mail: hammarlund@jacksonmi.com
Web Page: http://www.jacksonmi.com/hammarlund

NOW... BOATANCHORS Conference!
talk, buy-sell-trade all in one place!
Moderator: Robert Fowle
at: http://www.inetnc.com/hamchat/

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: Larry Godek <AZCOT@gnn.com>
Subject: RAK & H-Wells
Message-ID: <199702141031.FAA15146@mail-e2b.gnn.com>

Thanks to all who responded with information on the RAL-RAK and to
Bobbi on her comments concerning the Harvey-Wells Z-Match.

And now, onward to San Diego.

Larry Godek W0OGH
AZCOT@gnn.com

Gilbert, AZ. 85233

Ex-W6KQL, W8BPV, DL5LS, K0TAO, KN6TUP

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997

From: Robert Fowle <hammarlund@jacksonmi.com>
Subject: Reduced: fs: Fluke 8502A Digital Multimeter...it's gotta go
Message-ID: <3303E90E.4A43@jacksonmi.com>

have the following to move out...(tucker is getting $1395.00 for this
unit)it was $6,000 new in 1990....

Fluke model 8502A with the following modules
installed:
controler (model blacked out)
Isolator/ext. trigger module 486415
fast R2 A/D converter module 383984
active filter module 383976
DC signal conditioner module 383901
current shunts module 383943

Digital Multimeter...6.5 digit display
math function..and more...I believe it's 6ppm(s)?
it must go....first $275 gets it shipped..continental US
others would be extra..
thank you
Robert
--
**** Visit my Web Page.....****
===]-[->
Robert Fowle   KC8DBC
1215 Winifred
Jackson, Mich. 49202-1946
Ph. 517-789-6721
E-mail: hammarlund@jacksonmi.com
Web Page: http://www.jacksonmi.com/hammarlund

NOW... BOATANCHORS Conference!
talk, buy-sell-trade all in one place!
Moderator: Robert Fowle
at: http://www.inetnc.com/hamchat/

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: Mike & Holly Steussy <hikrbikr@erols.com>
Subject: Rosemary's BAs
Message-ID: <330506C2.4E62@erols.com>

In my garage, I have a respectable pile of BA stuff that belongs to
Rosemary, aged English widow of one of the unsung heroes of WW2. He was
a Frenchman who parachuted into occupied France to deliver radios and no
doubt other equipment and information to the French Resistance. This
chap died about 15 years ago leaving a basement full of electronic

equipment, parts, books and junk. A young Army officer and his son are sorting it out and asked me to try to help her by selling off the most collectable items.

Here is the list of specific items that I made by a quick survey in a freezing garage last night:

BC-221T frequency meter (hinge is a little rusty, but otherwise restorable; with settings book & AC power supply)

VFB Line Corp. Impedance Bridge, Model 100A w/phones (a real antique)

General Radio Co. UHF Signal Generator, type 804C, in wooden case (also an antique)

Heathkits, mostly in good condition with original knobs & cabinets:
-- TS-2 TV Alignment Generator
-- BE-5 Battery Eliminator
-- G-7 Oscilloscope
-- RF-1 RF Signal Generator
-- IG-52 TV Alignment Generator
-- PS-3 Variable Voltage Regulated Power Supply (w/manual)
-- ID-22 Electronic Switch
-- GD-1 Grid Dip Oscillator, with VHF coil only (others may be in boxes of stuff)
-- WA-P2 Hi-fi Preamplifier
-- W6A 70 watt Amplifier
-- SK-10 Transistor Portable Broadcaster (two with original boxes) (probably quite rare since they are so cheap looking)

Crosley Model 515 2 band radio, no cabinet, but all knobs, 5 tubes, glass dial cover; covers .55-1.6 MHz & 1.6-3.8 MHz

Fada small bakelite table radio, AM broadcast band, dial calibrated in kHz and meters

The most collectable items are two cheap looking 1940s suitcases containing WW2 clandestine radio equipment. The smaller one contains what appears to be a wonderful little 3 tube CW transceiver, xtal controlled on transmit, and VFO on receive. Two crystals, dated April and May 1944, are in the set and a box labeled spares has the little headset and miniature key, along with spare tubes, fuses, etc. There is also a power cord and the set is configured to run on battery or line power at several voltage from 100 to 240 VAC. The labels are in English and it looks like a British made set that could have been carried around in plain sight of the occupying German troops. The larger suitcase is quite heavy and probably contains batteries, but might have an even larger radio. The key to the lock is broken and I haven't tried to force the lock. Perhaps some of you are familiar with or could identify these units.

Rosemary needs me to sell these units and I would like to do so at a price that's fair to her for such a rare and lovely BA. I've already had an offer of $200 for the little suitcase from a ham radio friend who frankly suggested it's worth much more. An English member of our radio suggested that UK collectors might be particularly anxious to have this unit. There are several boxes of similar crystals that I haven't examined for fit or frequency, but if they fit, then they would obviously go with the units. FWIW, all proceeds of these sales will go to Rosemary.

I would prefer to sell the stuff listed above to buyers in the local Washington/Northern Virginia area, except for the clandestine radio set(s), which I will ship at the buyer's expense. I would gladly entertain offers for all of the test equipment, radios and hi-fi gear and throw in the parts, books, and other stuff at no extra charge, if the buyer wants them. There are plenty of tubes and other great parts that BA restorers can or might use, so this is a good deal.

I will be out of town until Sunday 23 February, at which time I'll try to sell some of this stuff at the Vienna VA hamfest if there is no interest. Please e-mail me direct if you are interested in any or all of these items. Please do not telephone my home until we have established contact by e-mail.

By the way, Rosemary is donating to some museum two other radio sets her husband actually parachuted into France with.

73, Mike Steussy AE4R
Vienna VA

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: dlr11@scasd.k12.pa.us (Douglas Ripka)
Subject: Selenium Rectifier markings
Message-ID: <199702142127.QAA26670@scasd.k12.pa.us>

Hi all,

According to Marcus and Marcus's "Elements of Radio", p. 165,

"The Bar of the (schematic) symbol corresponds to the cathode of the rectifier... and usually is
indicated by a plus (+) marked on one terminal of the selenium rectifier...

this terminal connects to
the B+ line of the power supply."

Hope this clarifes things...

73,

Doug Ripka (dlr11@scasd.k12.pa.us)
KA3TTQ

State College Area High School, Center for Applied Academics and Technologies

---

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: "JOHN A. KING (WA1ABI)" <JAK@SUD2.ED.RAY.COM>
Subject: Selenium rectifier polarity
Message-ID: <01IFEDK6VSG28WW3T3@SUD2.ED.RAY.COM>

In my experience, selenium rectifiers have always been
marked 'opposite' to the convention we use today. Modern
convention is that the (+) end of a diode is the anode,
but the (+) end of a selenium is the end from which you
expect to get (+) voltage (ie, the cathode.)

Inadvertly reversing the polarity of a silicon diode when
replacing a selenium bias rectifier is a common gotcha,
and it the filter cap doesn't complain first, the tubes
sure will when you hit the plate switch with positive bias
on the control grids... "gee, I didn't know 811's could
_do_ that!"

73,
John King   WA1ABI

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: Tom Norris <badger@telalink.net>
Subject: Selenium rectifier polarity
Message-ID: <3.0.32.19970214073203.00737840@telalink.net>

> In my experience, selenium rectifiers have always been
> marked 'opposite' to the convention we use today. Modern
> convention is that the (+) end of a diode is the anode,

> but the (+) end of a selenium is the end from which you
> expect to get (+) voltage (ie, the cathode.)

I must be missing something here. I have always used in PS ckts, the cathodes
of SS diodes to get my positive voltage, have always used the cathodes
of tubes to get my positive voltage. I never did see a problem. If the
confusion
is that "the anode of a tube is positive" then why do Inot hear more
confusion
on SS regulated power supplies like "gee, this thing cant have positive
voltage
coming out of the emitter of that pass transistor, cuz the emitter is the
negative
end" or something? Maybe it has just been a long week, or maybe I just haven't
ran into the right kind of selenium stacks before.....
****
thermionic@techie.com

TANSTAAFL: There Ain't No Such Thing As A Free Lawyer......

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: Scott Robinson <spr@earthlink.net>
Subject: Selenium rectifier polarity markings
Message-ID: <v03007801af293378fade@[153.34.139.228]>

Folks,

As I recall, many seleniums are marked with a "+" at the cathode end. The
idea was, I suppose, that in a rectifier circuit, the cathode becomes
theeeee + terminal of the DC output.

These circutis are not complicated, and reference to the polarity of
associated electrolytics (if not yet exploded) should serve to remind one
of how to connect it all together.

Regards,

Scott Robinson
spr@earthlink.net

"Buy a Velocette and enjoy those qualities that turn motor-cyclists into
enthusiasts."

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: Bill Breshears <bbuck@cccbbs.com>
Subject: re Selenium Rectifier Polarity Warning
Message-ID: <01BC1A64.C053CB20@s10.cccbbs.com>

Hi Gang,

>From the response, I believe the subject warning has been achieved. i.e. review the circuit for proper diode polarity when replacing selenium rectifiers.

To satisfy my own curiosity, I checked some old Sarkes Tarzian Rectifier Div. literature I have, as follows:

"The red washer and/or the + marking denotes the positive end of the rectifier."

This possible ambiguity is resolved by circuit diagrams that clearly show the above markings are on the BAR end of the diode symbol on selenium rectifiers.

In the diagrams one end comes from the 117 vac, and the marked + end becomes the B+ terminal for filters and the radio. Perhaps the rationale for the marking convention?

Bill Breshears WC3K
Maryland
bbuck@cccbbs.com

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: Robert Fowle <hammarlund@jacksonmi.com>
Subject: SP-600 MANUALS   fs:
Message-ID: <3303FBB9.526A@jacksonmi.com>

Howdy!

thought i'd try this offer...(these will be copies)

I am offering 20 manuals (all i have on SP-600's, the Tech bulletin & the supplement....& SP-600 Designation's list per Hammarlund) all, shipped (cont. US, others extra) for $190 USD.

```
if your interested in this offer, email me...
if you want to see what all you'll get, visit my webpage at:
the address in my sig, then click on Hammarlund manuals...
to see the SP-600 list
see ya, & Happy BA hunting to all.
Robert
--
**** Visit my Web Page.....****
=================================================]-[->
Robert Fowle      KC8DBC
1215 Winifred
Jackson, Mich. 49202-1946
Ph. 517-789-6721
E-mail:  hammarlund@jacksonmi.com
Web Page:  http://www.jacksonmi.com/hammarlund

NOW... BOATANCHORS Conference!
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Moderator: Robert Fowle
at: http://www.inetnc.com/hamchat/


From boatanchors@theporch.com  Fri Feb 14 19:30:34 1997
From: "James F. Wood 253-7886" <WOODJ@mail.firn.edu>
Subject: Still looking
Message-ID: <C1197ZWSCKLXTL*/R=FIRNVX/R=A1/U=WOODJ/@MHS>

Hi I and aleast two others are looking for a manual for a pearch-simpson
Bimini marine radio. A copy for  me whould be fine,any other suggestions
etc on this rig also welcome.


Thanks Jim N4ACS/woodj@mail.firn.edu
A old Hippie Vietnam vet/ASA radio Op.
Philosopher for hire, will think for a BEER



From boatanchors@theporch.com  Fri Feb 14 23:54:37 1997
From: km1h@juno.com
Subject: Swap: 150MHz PC for Hammarlunds
Message-ID: <19970214.162817.9887.20.km1h@juno.com>

I have a NIB motherboard with the latest AMD 5x86-150MHz CPU. It has 4
ISA and 3 PCI slots, dual IDE slots, and all the other latest goodies. It
is a half size board that will fit just about any case.

Looking to swap for a Hammar in the HQ-129x thru 160 range. Cosmetics are
```

a secondary consideration...I want somethin that works or can easily be repaired for a daily worker station...not a museum piece.

I have many other curent PC items also for negotiations.

73......Carl KM1H

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Synthesizers are fine if toobie based!
Message-ID: <9702141831.AA155251@csemail.cropsci.ncsu.edu>

> I was just daydreaming about this the other night, when I got too tired
> to do any more -real- work.... I hadn't been thinking about the multiple
> osc. setup that Bob mentioned though, because of the spur problem. It
> can be very difficult to filter a 1.1 mhz signal from a 1 mhz signal by
> 100db ! All those mixers equals a nasty spur problem.

True, but the art of it is in combining the various frequencies by mixing so that spurs are minimal. For example, in the AN/SRT-14 synthesizer, it uses basic harmonics of 100khz to generate all desired increments of 0.1/1.0 mhz. Then, it generates 100 khz increments in the range of 1600-2500khz by discrete tuned circuits (10 oscillator tanks, all switched individually). Then, it generates 10 khz increments in the range of 210-300 khz by discrete tuned circuits (10 oscillator tanks) set for the desired 10khz step. Then, it generates 1 khz, 0.1 khz, and 0.01 khz steps by a second set of discrete tuned circuits (30 oscillator tanks) in the range of 81.00-90.00 khz. Only one discrete mhz harmonic is selected, along with one discrete 100 khz step, along with one discrete 10 khz step, along with one discrete 1 khz step, along with one discrete 0.1 khz step, along with one discrete 0.01 khz step. By proper choice of mixers and frequencies, the spurs are minimal. Unfortunately, it did have +-10khz spurs that were as high as -55db in my synthesizer drawer, and, like a fool, I decided to tweak the filter that drops it down to -75db or better, at which point the synthesizer drawer has not worked since (unrelated to filter tweaking, tho). All that is done in about 70 tubes, of which about 15 are mixers and 35 are oscillators and harmonic generators, and the rest amplifiers/comparators/filters and the like. What is driving me up the wall on mine is that all the oscillators and harmonic generators are working fine, but somewhere in the mixing scheme, something got amiss when I put it back together after tweaking that bloody filter! Arrrrrgh!

> The shielding requirements for this type of synth are also extreme. Most
> of those old HP generators that he mentioned have pretty poor
> phase-noise/spectrum-cleanliness characteristics.

Shielding needs to be good, but not really extreme. The key is modularity, and a lot of BNC cabling to isolate and shield the individual functional blocks. Alas, the switching is a nightmare, at least it is on that SRT-14.

> Since I'd just finished a work project using a 200mhz IC PLL synth., I naturally fell into thinking how one would implement something similar in BA terms.
>
> Two concerns immediately raised their ugly heads:
>
> a) While one can make fairly low parts count dividers with tubes, the freq selection in a PLL is done with -programmable- dividers. I'm not sure how programmability could be done at a low parts count still. Anybody know how?

The SRT-14 uses a lot of physical LC circuitry (requiring lots of O-scope Lissajous figuring to program the multipliers/mixers properly).

> b) Phase noise in the output is directly related to the switching speed of the dividers, among other factors. The phase noise is caused by timing jitter, and the slower the edge, the greater the jitter in general. How fast can a tube flop be made to switch? How fast would the edge have to be before other noise sources became predominant? How the heck will we keep switching noise from those 50volt nanosecond edges outta the rest of the BA?

Actually, the SRT-14 synthesizer uses multiplication rather than division to get its mixing frequencies. Thus true flipflops are not used. I was thinking that the 100khz could be easily divided down to 10 khz steps by use of a programmable divider or just a divide by 10 scheme, like one of the old Phantastron divider networks out of an old HP tube counter. If that turned out to be a problem, then the use of the 40 tuned tanks as the SRT-14 synthesizer uses would be the other choice, perhaps. If one did not need 0.01khz steps, and could get by with 0.1 or maybe 1.0 khz steps, then only 30 or 20 tuned tanks would be required, not an impossible task. With modern digital counters, setting the frequencies of the low variable step oscillators would not be that difficult. There are a lot of questions, and few answers, unfortunately, at this late date in the era.

> Before I finally tuckered out totally, the only conclusion I came to is that Nuvistors would be the tube of choice. They are fast, and small, and low power. Were there ever any dual-unit nuvistors? Like a 12AT7 but in Nuv pkg?

Nuvistors would be ideal, but where in the world would you find enough of them to do the job, let alone the sockets? The SRT-14 uses plain old dual triodes and pentodes throughout, and it generates frequencies in the range of 300-26000 khz in 0.01 khz steps. That would be more than sufficient for the average ham BA/GB use, I would think. There were

later generation tube synthesizers in the URT-2/3/4 class rigs, and
one later one before tubes were given up for the likes of the Collins
URC-32, I think the number was.

> It would be a lot of fun to get a tube PLL synth up and running! I can
> just see those nixies glowing now...

Well, nixies would be nice, but even plain rotary 0-10 position switches
and knobs would be usable.

What I would really like to see is a good single band BA/GB synthesizer
that would cover say 80M or 160M only, and then let the transmitter do
the work of doubling up to whatever band. If, for the sake of discussion,
all we needed was 80M, then that is only 500 discrete channels if 1 khz
steps are used. That becomes a 3 knobber synthesizer. There oughtta
be a way to do that in about 20 tubes, and be reasonably clean, and
be reasonably reproducible.

> Richard

73/ZUT DE NA4G/Bob UP

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Synthesizers are fine if toobie based!
Message-ID: <9702141904.AA155337@csemail.cropsci.ncsu.edu>

> With over 200 boat anchors, I obviously love old gear. It's easy to repair
> and has a certain appeal to me that solid state rigs don't. However, with
> respect to synthesizers, I have to differ with you. I have worked on tube
> type units and don't care to again. On the other hand, since I make my
> living convincing our customers to use our (Philips Semiconductors) parts and
> then help them do so, I felt compelled to offer my opinion.

Wonderful! I wish I had room for 200, but alas, can only muster up room for
about 25 without tilting the house over, and still getting in the shack.

Most of the discussion on this really relates to the possibility of
finding surplus a vacuum tube synthesizer. The odds are NOT good that
any of us would really undertake a scratch built VT synthesizer, although
once you understand how the tube models were done in the past, that is
not a totally remote possiblity. It is likely that one might come across
a surplus synthesizer drawer, now and again. In that case, it could be
pressed into BA service, with some tongue in cheek and a lot of thinking.

A more real approach, you hint at, below. Nothing particularly wrong with that, and it is a somewhat easier and saner approach.

> We make a single chip synthesizer that will allow you to create any frequency
> up to 30 MHz in 1KHz steps.   (etc.......)

Sounds good, send me info on it and on what your friend is doing. Also, any spec/guide sheets on how to practically set one up would be desireable.

> At a single piece cost $4.77, it would seem this one cubic inch solution is
> much more practical.   (etc.......)

Agreed, but not pure BA, but I would still be interested in it, even for BA/GB use, as outlined below.

> The overall cost would be under $30, depending on the features included.

Sounds good, so tell me more.

> Of course, there are also other solutions. Direct digital synthesis is the
> lastest frequency generation technique. We don't offer them (yet) but we
> do have the D/A converters they require. I have a friend who is developing
> such a VFO even as we speak.

This is where it should be. Direct digital synthesis to the nearest hz from dc to 100 mhz would be nice, although anything that would do that in the basic 160M or 80M or 5mhz range would probably be quite satisfactory for the average BA vfo'ing or generic xtal replacement. That is really all that I am after --- replacing the generic novice rock in many BA rigs. How I get there is important to the extent that if a BA/GB style toobie synthesizer is available, I would probably use it. If not, I might be interested in a generic sandystate replacement if it will fill in for the average xtal in the average old ham rig. With the price of xtals these days going through the roof, a synthesizer of any kine becomes more and more feasible.

> This is just my two cent's worth. For those BA enthusiasts that don't have
> room for a 175 pound, two cubic foot unit on their already crowded operating
> tables, perhaps a solid state solution isn't so bad after all.

Hey, I don't have room for them, either, but WHEN they work, they are a very nice BA in the true BA tradition. Keeping them up, for the neophyte is a learning experience, for sure.

For the sake of our discussion, A Purist BA type would love the tube style synthesizer, and go the limit with it. Alas, there are not a great many of those folks around, or the equipment still around. Thus the average Boatanchorite or Glowbuggite who wants to get ol' Uncle Henry's DX-60 up and running again or that Breadboard 6L6

Special up and perking, might be amenable to using a standardized BA/GB rock replacement synthesizer. Also, it would be nice to have a good synthesizer that would emit a stable and precise reference frequency anywhere in the usual BA/GB ham bands, for alignment, and for band edge spotting, etc. Thus, even as a simple workbench tool, a good cheap BA/GB synthesizer, whether vacuum tube or sandystate would be a good project. So, if there is any hidden agenda in all of this, it would be to a) make a good rock replacement and b) make a good bench tool.

Further discussion is most welcome, on the list if BA/GB related or off if sandystate related.

73/ZUT DE NA4G/Bob UP

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: bill@skeeter.frco.com (William Hawkins)
Subject: Re: Synthesizers are fine if toobie based!
Message-ID: <9702142036.AA08202@skeeter.bvc.frco.com>

Well, I got to thinking of the tone wheels in electronic organs. As an ME, that idea has some appeal. Run a shaft at 3600 rpm from a synchronous motor, with a number of slotted disks, lamps and photocells to get the 30 signals in the 81 to 90 khz range. Could use photofilm disks to get higher frequencies.

But there is another way, that makes less noise. Use a CRT (like 3BP1) for each decade. Use a 90 degree pahse shifter to drive it with circular sweep. Make a stationary film grating with 10 concentric circles of lines and put it over the face of the CRT. Read the result with a phototube. Pick the circle (and frequency)
with a ten step attenuator on the sweep drive. No more alignment problems. The shielding is for light, not RF. Bigger than a chip, but smaller tha 35 tubes and tuned circuits. Can you do optical mixing?

The idea comes from the color vidicon that uses color filter stripes on its face to generate 3.58 MHz red and blue signals in the video output, with no tuned circuits.

Regards,
Bill Hawkins bill@skeeter.frco.com

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: "Bob Ragain, 303-470-2534, RAGAIN@SEDALIA.OMNES.SLB.COM"

<RAGAIN@hubvx6.sedalia.wireline.slb.com>
Subject: The Farnsworth story and coaxial cable origin
Message-ID: <970214125407.2e00bc40@hubvx6.sedalia.wireline.slb.com>

Folks,

I just read the Farnsworth Chronicles and thoroughly enjoyed the story.
Thanks to other BA'ers who pointed it out to us.

(home web page is: http://www.edge.net/noma/philo/index.html)

In Part 10, credit is given to AT&T, Bell Labs, for the invention of coaxial cable, in 1935, to pass TV signals from city to city. I always wondered where and when coaxial cable was first used. Had always heard coax was a WW-II invention.

Bob

Bob Ragain WB4ETT Littleton, CO

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: "Michael St. Angelo" <mstangelo@worldnet.att.net>
Subject: re:TREE MOUNT SUGGESTIONS
Message-ID: <19970214133441.AAA27622@LOCALNAME>

QST had an article on this subject a couple of years ago. The author ran a tree service. As I recall, he recommended the eyelook method over the loop method as causing the least long term damage.

Does anyone recall the date of the issue?

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: "Jim Berry" <basalop@eskimo.com>
Subject: re:TREE MOUNT SUGGESTIONS
Message-ID: <199702150026.QAA23125@mail.eskimo.com>

Hello out there ...

I am still waiting for some ideas on how to actually attach the device that is going to hold up a wire to a tree. I was thinking about, the next time I get a place with a tree, that I would use a tire. The last time I did put wires in a tree I used chunks of chain that had been passed through bicycle inner tubes. This whole affair was easy for the tree climbing dude to wrap around the trunk of a tree and stick bolt a thru. Worked great but I still would like to come up with a way to spread the weight out more. Still waiting.

Oh also, I liked the comment from the one member who used plastic bottles to weigh down the end of the halyard holding the antenna wire. They would get lifted off the ground in succesion. That is good idea I feel. Had a friend who had a wire like a hundred feet up into a fir tree. He used one of those white plastic buckets filled with rocks to get the right tension. Thing is that a tree that tall will drag a bucket of rocks 10 feet one way, then the other, so you have to have it pretty far off the ground and also some way to keep it from swaying in the wind. A line going from the bucket to another weight laying on the ground solved most of the problem. Remember that if you use a bucket to make sure there is holes in the bottom of it to let the rain water drain out.

73 Jim K7SLI

Jim Berry K7SLI. QTH: Marysville, Wa (Near Seattle)
Email: basalop@eskimo.com FAX: 360-659-1360
Snail Mail: 5318 142nd PL NE Marysville, Wa 98271

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: shep shepard <shep@northlink.com>
Subject: TUBES SELL/Trade
Message-ID: <199702141631.JAA07874@smtp.northlink.com>

I have a quantity of tubes (6+ ea), surplus to my needs:

8552 2E24 7C7 717A (WE) 6AX4 6X4 6AK6 6SJ7 6CB5 HY312 THY ARE MOSTLY NOS

Need the following :

3RP1 6C10 6J11 1V2

THANKS!

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997

From: Ho4bart@aol.com
Subject: Re: unusual circuit
Message-ID: <970214123035_2026905804@emout17.mail.aol.com>

In a message dated 97-02-13 16:13:29 EST, km1h@juno.com writes:

<< Yep, the "Reflex Circuit" was fairly popular in the 50's. >>

what bob posted is the first example i've heard of 2-frequency RF reflexing. (of course, i've not had the exposure of having worked on consumer electronics). the common reflex ckt everybody has seen reflexes audio thru an RF or IF amp. one of the neatest implementations of this i have seen was in a regen rec ckt with i think 3 triodes in a compactron: the first served as a grounded grid untuned antenna isolater (to get away from the bad effects of having the regen's tuned circuit out there flapping in the breeze), then from the detector triode the audio fed back into this 1st stage as a common cathode amplifier.
one ckt that has long bewondered me is the 1st audio/bfo osc in the TCS receiver. simultaneous use of the same triode. seems to me that the varying audio level would modulate the bfo, maybe giving rise to a rough audio on ssb, but it seems to work fine on cw. hue miller

---

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: kb5wwo@juno.com (George Folse)
Subject: Wanted
Message-ID: <19970214.210005.4831.1.kb5wwo@juno.com>

Still looking for Heath HW-10 and HR10.
Got a bite on Ranger II from w5tvw.
Chuck wa7zze, do you have clues on the two Heath items
thanks
George Folse kb5wwo@juno.com
630 Dolhonde St.
Gretna,La. 70053

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: w9fs@juno.com (Jerry W. Daugherty)
Subject: Wanted Schematic
Message-ID: <19970214.232657.5110.0.W9FS@juno.com>

Want copy of schematic for SX-71, E-mail me and let me know .

Thanks in advance

Jerry W. Daugherty W9FS, ex K9PFV, W4RXU, W9FTI, DL5GI.
VHF-UHF Nut.   May all your blessings outweigh your needs.

From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: jproc@bellglobal.com
Subject: RE: Warning, Replacing Seleniums
Message-ID: <Chameleon.4.01.2.970213234310.jproc@jproc.bellglobal.com>

Hi Tim,

>reading your caution regarding polarity marking on selinum rectifiers
>brought back some memories of 40 years ago

The precaution regarding selenium polarity was passed on by Bill so I can't take the credit for that, but I certainly enjoyed your little story. There have been many occassions when electronic components have been marked incorrectly. In challenging the remarks about the 'reversed' selenium markings, I am simply trying to differentiate whether seleniums were in fact marked differently in the distant past or whether it was simply a case of discovering incorrectly marked components. My money rides on the latter:-)

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Fri Feb 14 23:54:37 1997
From: dlr11@scasd.k12.pa.us (Douglas Ripka)
Subject: Wayne Kerr Bridge Info Needed
Message-ID: <199702142117.QAA26565@scasd.k12.pa.us>

Hi all,

I just picked up a pair of Wayne Kerr pieces, a Universal Bridge B221 and a Autobalance Adapter AA221. Other than a pair of crumbling patch cables, I got nothing else, so I have some questions to pose to the group:

1) Do these units work together?

2) If yes, how are they interconnected?

3) What type of source is used as the generator for the bridge? (voltage
level, frequency)

4) What is an Autobalance Adapter?

5) Is there someone who has manuals or copies available for these?

6) Does a special fixture go on the front of the bridge where the "E" and
"I" BNC jacks? If
so, can I make a replacement?

7) Would it be a terrible sin to remove the power recepticles on these and
connect standard
3 wire cords in their place?

>From what I have gathered here before, W-K is considered the English General
Radio, and so
it should be good equipment...

73,
Doug Ripka (dlr11@scasd.k12.pa.us)
KA3TTQ

State College Area High School, Center for Applied Academics and Technologies

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From boatanchors@theporch.com Fri Feb 14 09:42:26 1997
From: Eugene Rippen <soundval@foothill.net>
Subject: WTB R4-C 20m Xtal & 160m Xtal
Message-ID: <3303DB60.893@foothill.net>

Wanted Drake R4-C 20M crystal and 160M Crystal..

Eugene Rippen, 105 Donnington, Auburn, CA 95603

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: Roland S Geter Sr <wb6lna@primenet.com>
Subject: WTB: FPM-300 Any condition
Message-ID: <199702141910.MAA20513@primenet.com>

Will pay cash and shipping for ANY Hallicrafters or Wilcox FPM-300
Transceiver in any condition WORKING OR NOT!!

I will take any unit although most have been modified with an additional panel knob added to compensate for a broken internal Bandswitch band.

73's, Roland S. Geter PhD - WB6LNA/7
 Internet: wb6lna@primenet.com
        roland@primenet.com
     ax25: WB6LNA@kc7y.az.usa.noam
Toll-free: 800-399-4383 x765 anytime 24hrs

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 _______________________________________________________
|                                |
|    Visit our Web page for brand newly manufactured    |
|       Collins Radio Accessories and tell others. |
|                                |
|        http://www.primenet.com/~romad/collins.htm |
|_______________________________________________________|
```

From boatanchors@theporch.com Fri Feb 14 19:30:34 1997
From: JOHN_SEHRING.parti@ecunet.org
Subject: `CRYSTAL CONTROL' USING FREQ SYNTHESIZER
Message-ID: <9702141316.aa25357@pcusa01.ecunet.org>

Check out QST for March 1983 on how to use a (gasp!!!!!!) surplus Cybernet or Hy Gain CB radio (or just its circuit board) as a synthesized frequency source. Works FB.

Any Hy Gain-type CB board that uses exactly 3 crystals and has the semi-famous PLL02A PLL chip will work. These reached peak popularity in the late 1970s, millions were made.

Pse excuse the SS stuff but I use these boards to drive Motorola Sensicon FM BA receivers on 10 m FM (29.6 MHz, etc.).

 -John Sehring (02/12/97 10:25 am MT @Baker, Montana) UCC wb2eqg